



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 52**

**[EPA-R08-OAR-2022-0632; FRL-10362-01-R8]**

### **Air Plan Approval; Colorado; Serious Attainment Plan Elements and Related Revisions for the 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Proposed rule.

**SUMMARY:** On March 22, 2021, the State of Colorado submitted State Implementation Plan (SIP) revisions related to attainment of the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS) for the Denver Metro/North Front Range (DMNFR) Serious nonattainment area by the applicable attainment date of July 20, 2021. The Environmental Protection Agency (EPA) proposes to approve the majority of the submittal, including base and future year emission inventories, a reasonable further progress (RFP) demonstration, a reasonably available control measures (RACM) analysis, a motor vehicle inspection and maintenance (I/M) program, a nonattainment new source review (NNSR) program, 2020 motor vehicle emissions budgets (MVEBs) and transportation controls, a clean fuel fleet program, and revisions to Colorado Air Quality Control Commission (Commission or AQCC) regulations for the control of ozone via ozone precursors and control of hydrocarbons via oil and gas emissions. The EPA is also proposing to approve portions of the reasonably available control technology (RACT) analyses and revisions from submissions made on May 13, 2020; May 18, 2021; and May 20, 2022. Finally, the EPA proposes to approve revisions from submissions made on May 14, 2018, May 13, 2020, and May 20, 2022 that were conditionally approved on May 13, 2022. This action is being taken in accordance with the Clean Air Act (CAA).

**DATES:** Written comments must be received on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** Submit your comments, identified by Docket ID No. EPA-R08-OAR-2022-0632, to the Federal Rulemaking Portal: <https://www.regulations.gov>. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from [www.regulations.gov](https://www.regulations.gov). The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e., on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <http://www2.epa.gov/dockets/commenting-epa-dockets>.

*Docket:* All documents in the docket are listed in the [www.regulations.gov](https://www.regulations.gov) index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available electronically in [www.regulations.gov](https://www.regulations.gov). To reduce the risk of COVID-19 transmission, for this action we do not plan to offer hard copy review of the docket. Please email or call the person listed in the **FOR FURTHER INFORMATION CONTACT** section if you need to make alternative arrangements for access to the docket.

**FOR FURTHER INFORMATION CONTACT:** Abby Fulton, Air and Radiation Division, EPA, Region 8, Mailcode 8ARD-IO, 1595 Wynkoop Street, Denver, Colorado, 80202-1129, telephone number: (303) 312-6563, email address: [fulton.abby@epa.gov](mailto:fulton.abby@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document wherever “we,” “us,” or “our” is used, we mean the EPA.

The information presented in this document is organized as follows:

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**I. What Action is EPA Taking?**

As explained below, the EPA is proposing various actions on Colorado’s proposed SIP revisions that were submitted on May 13, 2020, March 22, 2021, May 18, 2021, and May 20, 2022. Specifically, we are proposing to approve portions of Colorado’s Serious attainment plan

for the 2008 8-hour ozone NAAQS. In addition, we propose to approve the MVEBs and revisions to Regulation Number 7 (Reg. 7) contained in the State's submittal. We also propose to approve all other aspects of the submittal, except for the RACT submission for certain sources and enhanced monitoring, which we will be acting on at a later date, and for the attainment demonstration and contingency measures. We are also proposing to approve revisions to Colorado Regulation Number 21 (Reg. 21) from the State's May 13, 2020 submittal, and to Reg. 7 from the State's May 18, 2021 submittal. Finally, we are proposing to approve the Reg. 7 revisions from the State's May 14, 2018, May 13, 2020, and May 20, 2022 submittals that were conditionally approved on May 13, 2022.<sup>1</sup>

The basis for our proposed action is discussed in this proposed rulemaking. Technical information that we rely upon in this proposal is in the docket, which is available at <http://www.regulations.gov>, Docket No. EPA-R08-OAR-2022-0632.

## **II. Background**

### *2008 8-Hour Ozone NAAQS Nonattainment*

On March 12, 2008, the EPA revised both the primary and secondary NAAQS for ozone to a level of 0.075 parts per million (ppm) (based on the annual fourth-highest daily maximum 8-hour average concentration, averaged over 3 years), to provide increased protection of public health and the environment.<sup>2</sup> The 2008 ozone NAAQS retains the same general form and averaging time as the 0.08 ppm NAAQS set in 1997, but is set at a more protective level. Specifically, the 2008 8-hour ozone NAAQS is attained when the 3-year average of the annual fourth-highest daily maximum 8-hour average ambient air quality ozone concentrations is less than or equal to 0.075 ppm.<sup>3</sup> Effective July 20, 2012, the EPA designated as nonattainment any

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<sup>1</sup> Final rule, Air Plan Conditional Approval; Colorado; Revisions to Regulation Number 7 and Oil and Natural Gas RACT Requirements for 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area, 87 FR 29228.

<sup>2</sup> Final rule, National Ambient Air Quality Standards for Ozone, 73 FR 16436 (March 27, 2008). The EPA has since further strengthened the ozone NAAQS, but the 2008 8-hour standard remains in effect. See Final Rule, National Ambient Air Quality Standards for Ozone, 80 FR 65292 (Oct. 26, 2015).

<sup>3</sup> 40 CFR 50.15(b).

area that was violating the 2008 8-hour ozone NAAQS based on the three most recent years (2008–2010) of air monitoring data.<sup>4</sup> With that rulemaking, the Denver-Boulder-Greeley-Ft. Collins- Loveland, Colorado area (Denver or DMNFR Area) area was designated nonattainment and classified as Marginal.<sup>5</sup> Ozone nonattainment areas are classified based on the severity of their ozone levels, as determined using the area’s design value. The design value is the 3-year average of the annual fourth highest daily maximum 8-hour average ozone concentration at a monitoring site.<sup>6</sup> Areas designated as nonattainment at the Marginal classification level were required to attain the 2008 8-hour ozone NAAQS no later than July 20, 2015, based on 2012–2014 monitoring data.<sup>7</sup>

On May 4, 2016, the EPA published its determination that the Denver Area, among other areas, had failed to attain the 2008 8-hour ozone NAAQS by the attainment deadline, and that it was accordingly reclassified to Moderate ozone nonattainment status.<sup>8</sup> Colorado submitted SIP revisions to the EPA on May 31, 2017 to meet the Denver Area’s requirements under the Moderate classification.<sup>9</sup> The EPA took final action on July 3, 2018, approving the majority of the May 31, 2017 submittal, but deferring action on portions of the submitted Reg. 7 RACT rules.<sup>10</sup> On February 24, 2021, the EPA took final action approving additional measures as addressing Colorado’s RACT SIP obligations for Moderate ozone nonattainment areas.<sup>11</sup> Areas that were designated as Moderate nonattainment were required to attain the 2008 8-hour ozone

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<sup>4</sup> Final rule, Air Quality Designations for the 2008 Ozone National Ambient Air Quality Standards, 77 FR 30088 (May 21, 2012).

<sup>5</sup> *Id.* at 30110. The nonattainment area includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson Counties, and portions of Larimer and Weld Counties. *See* 40 CFR 81.306.

<sup>6</sup> 40 CFR part 50, appendix I.

<sup>7</sup> *See* 40 CFR 51.903.

<sup>8</sup> Final rule, Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Several Areas for the 2008 Ozone National Ambient Air Quality Standards, 81 FR 26697 (May 4, 2016).

<sup>9</sup> CAA section 182, 42 U.S.C. 7511a, outlines SIP requirements applicable to ozone nonattainment areas in each classification category. Areas classified Moderate under the 2008 8-hour ozone NAAQS had a submission deadline of January 1, 2017 for these SIP revisions (81 FR 26699).

<sup>10</sup> Final rule, Approval and Promulgation of State Implementation Plan Revisions; Colorado; Attainment Demonstration for the 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area, and Approval of Related Revisions (83 FR 31068).

<sup>11</sup> Final rule, Approval and Promulgation of Implementation Plans; Colorado; Revisions to Regulation Number 7 and RACT Requirements for 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area, 86 FR 11125.

NAAQS no later than July 20, 2018, based on 2015–2017 monitoring data.<sup>12</sup> On December 26, 2019, the EPA published its determination that the Denver Area, among other areas, had failed to attain the 2008 8-hour ozone NAAQS by the attainment deadline, and that it was accordingly reclassified to Serious ozone nonattainment status.<sup>13</sup>

### **III. Summary of the State’s SIP Submittals**

We are proposing to take action on Colorado SIP submittals made on five different dates:

#### *May 14, 2018 Submittal*

This submittal contains amendments to Reg. 7, sections XII (Volatile Organic Compound Emissions from Oil and Gas Operations) and XVIII (Natural Gas-Actuated Pneumatic Controllers Associated with Oil and Gas Operations) to meet RACT for oil and gas sources covered by the EPA’s 2016 Oil and Gas Control Techniques Guidelines (CTG).<sup>14</sup> We previously acted on all parts of this SIP submittal<sup>15</sup> except for revisions to Reg. 7, section XII.J.1., concerning centrifugal compressors, as to which we proposed conditional approval. We are now proposing approval of those revisions.

#### *May 13, 2020 Submittals*

On this date the State submitted two SIP revisions. One of the submittals includes a full reorganization of Reg. 7 into parts A–E, amends oil and gas storage tank requirements, updates RACT requirements for major sources of volatile organic compounds (VOC) and nitrogen oxides (NOx) in the DMNFR Area, updates requirements for gasoline transport truck testing and vapor control systems, and contains typographical, grammatical, and formatting corrections throughout. We previously acted on all parts of this SIP submittal<sup>16</sup> except for revisions to Reg. 7, sections I.D., I.E, and I.F. concerning storage tanks, and section I.J.1. concerning centrifugal

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<sup>12</sup> See 40 CFR 51.903.

<sup>13</sup> Final rule, Finding of Failure To Attain and Reclassification of Denver Area for the 2008 Ozone National Ambient Air Quality Standard, 84 FR 70897 (Dec. 26, 2019); see 40 CFR 81.306.

<sup>14</sup> Control Techniques Guidelines for the Oil and Natural Gas Industry, EPA–453/B–16–001 (Oct. 2016).

<sup>15</sup> Final rule, Approval and Promulgation of Implementation Plans; Colorado; Revisions to Regulation Number 7; Aerospace, Oil and Gas, and Other RACT Requirements for the 2008 8- Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area, 86 FR 61071 (Nov. 5, 2021).

<sup>16</sup> 86 FR 61071 (Nov. 5, 2021).

compressors, as to which we proposed conditional approval. We are now proposing approval of those revisions.

The second submittal contains new Reg. 21 to limit the VOC content in consumer products and in architectural and industrial maintenance (AIM) coatings manufactured, distributed, or sold in the DMNFR Area. Specifically, the Commission adopted VOC standards in the Ozone Transport Commission (OTC) AIM coatings model rule phase 2 (2014) and VOC standards in the OTC consumer products model rule phase 4 (2013). Reg. 21 includes definitions, exemptions, labeling, and recordkeeping provisions based on the OTC model rules.

#### *March 22, 2021 Submittal*

This submittal contains the State's Serious ozone attainment plan and revisions to Reg. 7 to include RACT requirements in Colorado's ozone SIP for 50 tons per year (tpy) major sources of VOC and/or NOx. The Reg. 7 revisions include expansion of categorical requirements to reduce VOC emissions related to wood surface coatings in part C, section I.O., adding NOx emission limits for turbines, boilers, and landfill or biogas engines in part E, section II, and adding categorical requirements to reduce VOC emissions related to foam manufacturing in part E, section V. Typographical, grammatical, and formatting corrections were also made.

#### *May 18, 2021 Submittal*

The state regulations included with this submittal contain mostly state-only revisions that have not been submitted for inclusion in the SIP. Portions of these regulations submitted as SIP revisions include typographical, grammatical, and formatting corrections to the outline of Reg. 7 and part E (combustion equipment at major source RACT).

#### *May 20, 2022 Submittals*

On this date the State submitted three SIP revisions. One of the submittals contains amendments that were mostly state-only and not submitted as SIP revisions. The SIP revisions adopted by the AQCC on Feb. 19, 2021 include updates to definitions in Reg. 7, part D, section III (natural gas-actuated pneumatic controllers associated with oil and gas operations).

Another submittal contains amendments to Reg. 7 that establish categorical RACT requirements for major sources of NO<sub>x</sub> and certain CTG sources in the DMNFR Area. Specifically, on July 16, 2021 the AQCC adopted RACT requirements in part C, section I for miscellaneous metal parts coatings and part E, section II RACT requirements for process heaters at major sources of NO<sub>x</sub> emissions. Typographical, grammatical, and formatting corrections were also made.

The third submittal contains revisions concerning RACT requirements for oil and gas sources. Specifically, on Dec. 17, 2021 the AQCC adopted revisions to Reg. 7, part D, section I for performance or manufacturer testing for combustion equipment used to control emissions from storage vessels and wet seal centrifugal compressors as to which we proposed conditional approval. We are now proposing approval of those revisions.

#### **IV. Procedural Requirements**

The CAA requires that states meet certain procedural requirements before submitting SIP revisions to the EPA, including the requirement that states adopt SIP revisions after reasonable notice and public hearing.<sup>17</sup> For the May 14, 2018 submittal, the AQCC provided notice in the Colorado Register on August 10, 2017<sup>18</sup> and held public hearings on the revisions on October 19 and 20, 2017. The Commission adopted the revisions on November 17, 2017. The revisions became state-effective on December 30, 2017.

For the May 13, 2020 (part D, oil and gas) submittal, the AQCC provided notice in the Colorado Register on October 10, 2019<sup>19</sup> and held public hearings on the revisions on December 17–19, 2019. The Commission adopted the revisions on December 19, 2019. The revisions became state-effective on February 14, 2020.

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<sup>17</sup> CAA section 110(a)(2), 42 U.S.C. 7410(a)(2),

<sup>18</sup> 40 CR 15 available at <https://www.sos.state.co.us/CCR/RegisterHome.do>.

<sup>19</sup> 42 CR 19.



For the May 13, 2020 (Reg. 21) submittal, the AQCC provided notice in the Colorado Register on May 10, 2019<sup>20</sup> and held a public hearing on the revisions on July 18, 2019. The Commission adopted the revisions on November 17, 2016. The revisions became state-effective on September 14, 2019.

For the March 22, 2021 submittal, the AQCC provided notice in the Colorado Register on October 10, 2020<sup>21</sup> and held a public hearing on the revisions on December 16, 2020. The Commission adopted the revisions on December 18, 2020. The revisions became state-effective on February 14, 2021.

For the May 18, 2021 submittal, the AQCC provided notice in the Colorado Register on July 10, 2020<sup>22</sup> and held a public hearing on the revisions on September 17, 2020. The Commission adopted the revisions on September 23, 2020. The revisions became state-effective on November 14, 2020.

For the May 20, 2022 submittal (part D, Definitions) the AQCC provided notice in the Colorado Register on January 10, 2021<sup>23</sup> and held a public hearing on the revisions on February 18, 2021. The Commission adopted the revisions on February 18, 2021. The revisions became state-effective on April 14, 2021.

For the May 20, 2022 submittal (Misc. Metals and Process Heater) the AQCC provided notice in the Colorado Register on May 10, 2021<sup>24</sup> and held a public hearing on the revisions on July 16, 2021. The Commission adopted the revisions on July 16, 2021. The revisions became state-effective on September 14, 2021.

For the May 20, 2022 submittal (part D, Oil and Gas) the AQCC provided notice in the Colorado Register on October 10, 2021<sup>25</sup> and held a public hearing on the revisions on December

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<sup>20</sup> 42 CR 9.

<sup>21</sup> 43 CR 19.

<sup>22</sup> 43 CR 13.

<sup>23</sup> 44 CR 1.

<sup>24</sup> 44 CR 9.

<sup>25</sup> 44 CR 19.

14, 2021. The Commission adopted the revisions on December 17, 2021. The revisions became state-effective on January 30, 2022.

Accordingly, we propose to find that Colorado met the CAA's procedural requirements for reasonable notice and public hearing.

## **V. The EPA's Evaluation of Colorado's Submissions**

### *2008 Ozone Serious SIP Submittal*

CAA section 182 outlines SIP requirements applicable to ozone nonattainment areas in each classification category. A Serious area classification triggers requirements for state submissions described in the EPA's regulations implementing the 2008 8-hour ozone NAAQS.<sup>26</sup> Examples of these requirements include submission of a modeling and attainment demonstration, RFP, an enhanced inspection and maintenance program, RACT, and RACM. Serious nonattainment areas had a submission deadline of August 3, 2020 for these SIP revisions.<sup>27</sup>

Colorado submitted SIP revisions to the EPA on March 22, 2021, to meet the requirements of a Serious area classification for the DMNFR Area. Colorado's proposed SIP revisions consist of the parts listed below.

- 8-Hour Ozone Attainment Plan (OAP), which includes monitoring information, emission inventories, an RFP demonstration, an attainment demonstration using photochemical grid modeling, a RACT analysis, a RACM analysis, a motor vehicle emissions I/M program, NNSR program certification, contingency measures, MVEBs for transportation conformity, and a clean fuel fleet program.
- Revisions to Reg. 7.

### *A. Emissions Inventories*

#### **1. Background**

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<sup>26</sup> See 40 CFR part 51, subpart AA.

<sup>27</sup> See 84 FR 70897 (Dec. 26, 2019).

CAA section 172(c)(3), requires that each SIP include a “comprehensive, accurate, current inventory of actual emissions from all sources of the relevant pollutant or pollutants in [the] area.” The accounting required by this section provides a “base year” inventory that serves as the starting point for attainment demonstration air quality modeling, for assessing RFP, and for determining the need for additional SIP control measures. An attainment year inventory is a projection of future emissions and is necessary to show the effectiveness of SIP control measures. Both the base year and attainment year inventories are necessary for photochemical modeling to demonstrate attainment. As previously noted, we are not acting on the attainment modeling demonstration in this action, but are evaluating Colorado’s emission inventories for purposes of meeting RFP requirements.

Colorado’s DMNFR Serious area attainment plan includes a 2011 base year inventory, a 2017 milestone year inventory, and a 2020 attainment year inventory. The inventories catalog NO<sub>x</sub> and VOC emissions, because these pollutants are precursors to ozone formation, across all source categories during a typical summer day, when ozone formation is pronounced. The State developed an updated 2017 “milestone year” emissions inventory for the Serious nonattainment area. When initially developed for the Moderate area SIP, the 2017 inventory was calculated based on projected values. The 2017 inventory approved as part of the Moderate area SIP has been updated for the purposes of the Serious area SIP using data collected in 2017<sup>28</sup> and methodologies as presented in chapter 3 of the OAP.

## 2. Evaluation

The 2011 base year inventory was included as part of the Moderate area SIP submittal and approved as part of our July 3, 2018 action.<sup>29</sup> As part of the Moderate area SIP, a projected 2017 attainment year emissions inventory was developed and approved by the EPA on July 3, 2018.<sup>30</sup> Due to the reclassification of the DMNFR to Serious nonattainment for the 2008 ozone

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<sup>28</sup> Pursuant to 40 CFR 51.1110(b), the values in the submitted 2011 base year EI are actual ozone season day emissions.

<sup>29</sup> 83 FR 31068 (July 3, 2018).

<sup>30</sup> *Id.*

NAAQS, CDPHE prepared an updated 2017 emissions inventory based on currently available data in accordance with the EPA's revised guidance on emissions inventory developments.<sup>31</sup> The updated 2017 emissions inventory was resubmitted to meet the State's Serious area SIP requirements.<sup>32</sup>

The 2017 milestone year emissions inventories are in tons per summer day and represent the most current available data, as of the time of submission, for emissions estimates for an average episode day during the peak summer ozone season of June through September. This includes actual data for the oil and gas sector and stationary sources in addition to newer data from updated regional transportation demand models used by the two Metropolitan Planning Organizations in the DMNFR Area.

The 2020 inventory is in tons per summer day and represents emissions estimates for an average episode day during the peak summer ozone season (June through September). The 2020 inventory for VOC and NOx accounts for emissions growth associated with changes in population, fuel use, and economic activity as well as emissions reductions associated with controls that were in place as SIP control measures by the beginning of the 2020 summer ozone season. The EPA has provided guidance on developing emission projections to be used with models and other analyses for demonstrating attainment of air quality goals for ozone.<sup>33</sup>

The 2017 milestone year and 2020 attainment emission inventories were developed using EPA-approved emissions models, methodology, and guidelines for stationary, mobile, and area emission sources.

The 2017 emissions inventories for power plants (also referred to as electric generating units) and other point sources were developed using Colorado Air Pollutant Emission Notice (APEN) reported data for each year, as specified in Tables 16 and 17 of the OAP. Area sources

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<sup>31</sup> See "Emission Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations," EPA-454/B-17-002. Revised May 2017.

<sup>32</sup> CAA section 182(c)(2)(B).

<sup>33</sup> Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations (May 2017) ("Emissions Inventory Guidance"), available at [https://www.epa.gov/sites/default/files/2017-07/documents/ei\\_guidance\\_may\\_2017\\_final\\_rev.pdf](https://www.epa.gov/sites/default/files/2017-07/documents/ei_guidance_may_2017_final_rev.pdf).

include many categories of emissions, such as coatings, household and personal care products, pesticides, and sealants. The 2017 area source emissions inventory is included in Table 18 of the OAP. The inventory was based on the EPA's 2014 National Emissions Inventory (NEI) and was derived from the 2014 NEI based on county population projections from the Colorado State Demography Office. The EPA finds that these sources (including those in the oil and gas sector) were adequately accounted for in the emissions inventory. The methodology used to calculate emissions for each respective category was consistent with recommendations and explanations in relevant EPA guidance,<sup>34</sup> employed applicable approved emission factors and NEI data, and was sufficiently documented in the SIP and in the State's technical support documents (TSD).<sup>35</sup>

Projected future emissions in 2020 were based on anticipated growth, technological advancements, and expected emissions controls that were to be implemented by the 2020 ozone season. The 2020 oil and gas emission inventory was based on 2017 actual site-specific emissions and 2018 APEN reported data, including technology and production and projected 2020 emissions and production. The 2020 emissions inventory for EGUs was developed based on Colorado APEN reported data for 2018 and is specified in Table 28 of the OAP. The future year inventory for other point sources beyond EGUs is based on 2018 APEN data. The 2020 area source inventory is provided in Table 30 of the OAP and was grown from the EPA's 2014 NEI based on county population projections from the State Demography Office. Reductions from implementation of Colorado AQCC Reg. 21 were then applied.<sup>36</sup> On-road and non-road mobile source emissions for the 2020 inventory were calculated using the EPA's MOVES2014b<sup>37</sup> model combined with local activity inputs including vehicle miles traveled (VMT) and average speed

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<sup>34</sup> Emissions Inventory Guidance; MOVES2014, MOVES2014a, and MOVES2014b Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity, EPA-420-B-18-039 (Aug. 2018) ("MOVES Guidance"), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100V7EY.pdf>.

<sup>35</sup> See Colorado Serious SIP submittal, TSD for Mobile and Area Sources Emissions Inventory Development. Available within the docket for this action.

<sup>36</sup> See section I. *SIP Control Measures* of this document for a discussion of Reg. 21 controls.

<sup>37</sup> EPA's Motor Vehicle Emission Simulator (MOVES) is a state-of-the-science emission modeling system that estimates emissions for mobile sources at the national, county, and project level for criteria air pollutants, greenhouse gases, and air toxics. See <https://www.epa.gov/moves>.

data, as well as local fleet, age distribution, meteorology, and fuels information. Table 34 of the OAP includes biogenic emissions as part of the overall 2020 future year emissions inventory.

Table 1 shows the emissions by source category from the 2011 base year, 2017 milestone year, and 2020 attainment year emission inventories.

**Table 1-Emissions Inventory Data**

Description	2011		2017		2020	
	VOC	NO <sub>x</sub>	VOC	NO <sub>x</sub>	VOC	NO <sub>x</sub>
Area (non-oil and gas) Total	60.6		65.3		54.6	
Non-Road Total	58.2	75.9	44		44.3	39.1
Oil and Gas Sources						
Area	48.9	22.2	43.6	38.1	54.5	34.4
Condensate/ Oil Tanks	216	1.1	107.7	1.4	50.2	0.6
Point	14.8	18.1	12	11.5	14.3	13.1
Oil and Gas Total	279.7	41.4	163.3	51.0	119.0	48.2
On-Road						
Light-Duty Vehicles	90.0	102.5	55.6	53.5	47.6	41.4
Medium/Heavy-Duty Vehicles	3.7	39.6	2.0	14.9	1.8	13.3
On-Road Total	93.7	142.1	57.6	68.4	49.4	54.7
Point Sources						
EGU	0.7	39.7	0.3	9.4	0.4	4.6
Non-EGU	25.9	21.0	22.6	15.8	24.6	17.1
Point Total	26.6	60.7			25	21.7
<b>Total Anthropogenic Emissions</b>	<b>518.8</b>	<b>320</b>	<b>353.1</b>	<b>187.1</b>	<b>292.3</b>	<b>163.7</b>

Details of Colorado's emissions inventory development are in Colorado's supporting TSD.<sup>38</sup> The inventories in the SIP are based on the most current and accurate information available to the State and the Regional Air Quality Council (RAQC) at the time the SIP was being developed. Additionally, the inventories comprehensively address source categories in the DMNFR nonattainment area, and were developed consistent with the relevant EPA inventory guidance. For these reasons, we propose to approve the 2017 milestone inventory and the 2020

<sup>38</sup> See Colorado Serious SIP submittal, TSD for Mobile and Area Sources Emissions Inventory Development. Available within the docket for this action.

inventory, which will be used to meet RFP requirements.<sup>39</sup> The following section discusses RFP further.

## *B. Reasonable Further Progress Demonstration*

### 1. Background

CAA section 182(b)(1) and the EPA's 2008 Ozone Implementation Rule<sup>40</sup> require each 8-hour ozone nonattainment area designated Moderate and above to submit an RFP demonstration for review and approval into its SIP that describes how the area will achieve actual VOC and NO<sub>x</sub> emissions reductions from a baseline emissions inventory. CAA section 182(b)(1), which is part of the ozone-specific nonattainment plan requirements of subpart 2 of the CAA, requires RFP to demonstrate a 15% reduction in VOC emissions. To satisfy the section 182(b)(1) RFP requirement, on May 31, 2017 Colorado submitted an RFP demonstration showing VOC emission reductions greater than 15% over the six years after the 2011 base year inventory (i.e., 2012-2017). The EPA approved this 15% RFP SIP on July 3, 2018.<sup>41</sup>

As noted above, the CAA section 182(b)(1) requirement for a 15% RFP demonstration applies to ozone nonattainment areas classified Moderate and above. In addition, Serious ozone nonattainment areas are subject to the CAA section 182(c)(2)(B) requirement to submit SIP revisions showing a 9% reduction of VOC<sup>42</sup> emissions over each consecutive three-year period beginning six years after redesignation until the attainment date. For the DMNFR Area, the redesignation date was July 20, 2012. Accordingly, the DMNFR Area was required to submit SIP revisions showing that 9% reductions in ozone precursor emissions would be achieved between January 1, 2018 and December 31, 2020.

### 2. Evaluation

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<sup>39</sup> The EPA approved Colorado's 2011 base year inventory in our July 3, 2018 action (83 FR 31068).

<sup>40</sup> 80 FR 12264, 12266 (March 6, 2015).

<sup>41</sup> 83 FR 31068. The state's 15% RFP demonstration was also sufficient to satisfy the more general CAA subpart 1 requirements of CAA section 172(c)(2), which permits a combination of VOC and NO<sub>x</sub> emission reductions to show RFP.

We reviewed the State's 9% RFP submittal for consistency with the requirements of the CAA and EPA regulations and guidance. To demonstrate compliance with RFP requirements, the State compared its 2017 milestone VOC inventory against its projected 2020 VOC emissions inventory and demonstrated that the projected 2020 emissions of VOC were at least 9% below the 2011 base year inventory. Colorado projected an 11.7% reduction in VOC emissions from 2017-2020.<sup>43</sup> As discussed in section V.A. of this document, the EPA reviewed the procedures Colorado used to develop its projected inventories and the State's submittal for consistency with the requirements of the CAA and the EPA's regulations and guidance and found them to be reasonable. We therefore propose approval of Colorado's Serious-area RFP demonstration.

### *C. Reasonably Available Control Technology (RACT) Analysis*

#### 1. Background

Section 172(c)(1) of the CAA requires that SIPs for nonattainment areas "provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology)." The EPA has defined "reasonably available control technology" (RACT) as "[t]he lowest emissions limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility."<sup>44</sup> The EPA provides guidance concerning what types of controls may constitute RACT for a given source category by issuing Control Techniques Guidelines (CTG) and Alternative Control Techniques (ACT) documents.<sup>45</sup> States must submit a SIP revision requiring the implementation of RACT for each

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<sup>43</sup> See OAP, Table 35 on page 4-21. This projection has proven to be correct. See the "Denver Metro Area/North Front Range Nonattainment Area Milestone Compliance Demonstration," March 31, 2021 and the EPA's 2020 milestone compliance demonstration adequacy letter, July 6, 2021. Available in the docket for this action.

<sup>44</sup> General Preamble for Proposed Rulemaking on Approval of Plan Revisions for Nonattainment Areas-- Supplement (on Control Techniques Guidelines), 44 FR 53761 (Sep. 17, 1979).

<sup>45</sup> See <https://www.epa.gov/ground-level-ozone-pollution/control-techniques-guidelines-and-alternative-control-techniques> for a list of EPA-issued CTGs and ACTs.



source category in the area for which the EPA has issued a CTG, and for any major source in the area not covered by a CTG.<sup>46</sup>

For a Moderate, Serious, or Severe area a major stationary source is one that emits, or has the potential to emit, 100, 50, or 25 tpy or more, respectively, of VOCs or NO<sub>x</sub>.<sup>47</sup> Accordingly, for the DMNFR Serious nonattainment area, a major stationary source is one that emits, or has the potential to emit, 50 tpy or more of VOCs or NO<sub>x</sub>. RACT can be adopted in the form of emission limitations or “work practice standards or other operation and maintenance requirements,” as appropriate.<sup>48</sup>

On reclassification to Serious status, the DMNFR Area was required to implement RACT as expeditiously as practicable, but no later than August 3, 2020 for RACT needed for demonstrating attainment and July 20, 2021 for RACT not needed for demonstrating attainment.<sup>49</sup> The Division conducted a series of analyses and rulemakings to address 2008 ozone Moderate and Serious RACT requirements.

As part of its May 31, 2017 Moderate ozone attainment plan, the Division conducted RACT analyses to demonstrate that the RACT requirements for CTG and major sources in the DMNFR Area had been fulfilled. The Division conducted these RACT analyses for VOC and NO<sub>x</sub> by listing state regulations implementing or exceeding RACT requirements for each CTG or non-CTG category at issue, and by detailing the basis for concluding that these regulations fulfilled RACT, through comparison with established RACT requirements described in the CTG

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<sup>46</sup> See CAA section 182(b)(2), 42 U.S.C. 7511a(b)(2)); *see also* Note, RACT Qs & As—Reasonably Available Control Technology (RACT): Questions and Answers, William Harnett, Director, Air Quality Policy Division, EPA (May 2006), available at <https://www.regulations.gov/document/EPA-R08-OAR-2020-0114-0008>.

<sup>47</sup> See CAA sections 182(b), 182(c), 182(d), 182(f)(1), and 302(j).

<sup>48</sup> See Memorandum, “Approval Options for Generic RACT Rules Submitted to Meet the non-CTG VOC RACT Requirement and Certain NO<sub>x</sub> RACT Requirements,” Sally Shaver, Director, Air Quality Strategies & Standards Division, EPA (Nov. 7, 1996), available at [https://www.epa.gov/sites/production/files/2016-08/documents/shavermemogenericract\\_7nov1996.pdf](https://www.epa.gov/sites/production/files/2016-08/documents/shavermemogenericract_7nov1996.pdf).

<sup>49</sup> Final rule, Finding of Failure To Attain and Reclassification of Denver Area for the 2008 Ozone National Ambient Air Quality Standard, 84 FR 70897, 70900 (Dec. 26, 2019); *see also* Final rule, Determination of Attainment Date, Extensions of the Attainment Date, and Reclassification of Several Areas Classified as Moderate for the 2008 Ozone National Ambient Air Quality Standards, 84 FR 44238 (Aug. 23, 2019).

and ACT guidance documents and rules developed by other state and local agencies. The EPA approved the majority of the State's CTG RACT analysis on July 3, 2018.<sup>50</sup>

In July 2018, the Commission adopted categorical RACT requirements for combustion equipment at major sources under the Moderate classification that the Commission had determined in 2016 were not addressed by SIP RACT requirements. In November 2019, the Commission adopted SIP requirements to include provisions that implement RACT for major sources of VOC and NO<sub>x</sub> under the Serious classification and for additional CTG VOC source categories in the Area. Specifically, the Commission adopted categorical RACT requirements for combustion equipment at major sources, major source breweries, and wood furniture manufacturing, and addressed the EPA's concerns with industrial cleaning solvent and metal furniture surface coating requirements. The EPA approved these revisions on February 24, 2021.<sup>51</sup>

In December 2019, the Commission adopted additional RACT requirements for major sources of VOC and NO<sub>x</sub> in the DMNFR Area under the Serious classification, including expanded categorical combustion equipment and new categorical general solvent use requirements. The EPA approved the majority of these revisions on November 5, 2021.<sup>52</sup> The State re-reviewed its point source inventory as part of the March 22, 2021 Serious OAP submittal to verify that non-CTG major sources (50 tpy) of VOC or NO<sub>x</sub> emissions in the DMNFR Area are subject to requirements that meet or exceed RACT.<sup>53</sup>

The RACT submissions that we are now proposing to approve include those that we have not previously acted on that are addressing RACT for several non-CTG VOC and NO<sub>x</sub> sources

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<sup>50</sup> See 83 FR 31068. A negative declaration as to RACT for sources covered by the aerospace CTG was approved on November 5, 2021 (86 FR 61071). Colorado's RACT demonstrations for sources covered by the industrial cleaning solvents, metal furniture coatings (2007), and wood furniture CTGs were approved on February 24, 2021 (86 FR 11127); and the state's RACT demonstration for sources covered by the oil and gas CTG was conditionally approved on May 13, 2022 (87 FR 29228).

<sup>51</sup> 86 FR 11127.

<sup>52</sup> Final rule, Approval and Promulgation of Implementation Plans; Colorado; Revisions to Regulation Number 7; Aerospace, Oil and Gas, and Other RACT Requirements for the 2008 8- Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area 86 FR 61071 (Nov. 5, 2021).

<sup>53</sup> See appendix 6-E of the OAP.

and categories. We are also proposing to convert to a full approval our previous conditional approval of submissions made on May 14, 2018, May 13, 2020, and May 20, 2022, concerning RACT related to the Oil and Gas CTG.

## 2. Evaluation

In preparing its RACT determinations, Colorado reviewed source permits, consulted with Division permitting and enforcement staff involved with each source, and consulted with the sources themselves.<sup>54</sup> Colorado also considered control strategies identified in the CTGs, ACTs, RBLC, EPA's Menu of Control Measures, New Source Performance Standards (NSPS), emission guidelines, National Emission Standards for Hazardous Air Pollutants (NESHAP), and in Colorado's regulations and determined that Colorado's major sources are currently subject to federally enforceable emission limits or requirements similar to measures described in these documents and regulations.<sup>55</sup> In 2019, Colorado incorporated by reference some NSPS and NESHAP requirements into its SIP and expanded the applicability of some existing RACT requirements. A summary of our proposed action with respect to each of these RACT categories follows.

**Table 2-Categories, Proposed Action, and Corresponding Sections of Submittals**

Category	Proposed action	Location of RACT demonstration
Oil and gas	Approval (converting previous conditional approval to full approval)	Technical Support Document for Reasonably Available Control Technology for the Oil and Gas Industry, Dec. 17, 2021 (contained within the May 20, 2022 submittal).
Combustion equipment at major sources	Approval	Technical Support Document for Reasonably Available Control Technology for Major Sources, Dec. 14, 2020 (contained within the March 22, 2021 submittal) and Technical Support Document for Reasonably Available Control Technology for Major Sources, July 16, 2021 (contained within the May 20, 2022 submittal).
Wood coating	Approval	Technical Support Document for Reasonably Available Control Technology for Major

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<sup>54</sup> See Colorado's Technical Support Document for Reasonably Available Control Technology for Major Sources, December 14, 2020. Available within the docket.

<sup>55</sup> See *id.*

		Sources, Dec. 14, 2020 (contained within the March 22, 2021 submittal).
Foam manufacturing	Approval	Technical Support Document for Reasonably Available Control Technology for Major Sources, Dec. 14, 2020 (contained within the March 22, 2021 submittal).

Cited materials are contained within the docket for this action.

We are proposing action on the RACT demonstrations for certain additional VOC CTG, non-CTG VOC, and NO<sub>x</sub> sources and categories. We have reviewed Colorado's new and revised VOC and NO<sub>x</sub> rules for the categories covered by the CTGs, and for major sources of non-CTG VOC and NO<sub>x</sub> sources for the 2008 8-hour ozone NAAQS, and the demonstrations submitted by Colorado. Based on this review we propose to find that these rules are consistent with the control measures, definitions, recordkeeping, and test methods in these CTGs and the CAA, and that they satisfy CAA RACT requirements for the categories in question.<sup>56</sup>

a. RACT for CTG Sources

Table 3 contains the CTGs, EPA reference document, and the corresponding sections of Reg. 7 that fulfill the applicable RACT requirements for the EPA-issued CTGs. Colorado's Reg. 7 contains SIP approved and submitted revisions (see section V.I. of this document); we propose to find that these revisions meet RACT requirements for the sources listed in Table 3.

**Table 3-Sources, EPA CTG Reference Document, and Corresponding Sections of Reg. 7  
Proposed for Approval to Fulfill RACT**

Sources in the DMNFR Area	CTG Reference Document	Date of CTG	Reg. 7 Sections Fulfilling RACT
Oil and gas	Control Techniques Guidelines for the Oil and Natural Gas Industry	2016	part D, sections I, II, and III.
Miscellaneous Metal Coatings, Tables 2 and 7 of the CTG	Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings	2008	part C, section I.L.2.

<sup>56</sup> See <https://www.epa.gov/ground-level-ozone-pollution/ract-information>.

We have reviewed the emission limitations and control requirements for the above sources and compared them against the EPA's CTG documents and available technical information in CTG dockets. The EPA has also evaluated the submitted rules and has determined that they are consistent with the CAA, the EPA's regulations, and the EPA's policies. Based on the information in the record, we propose to find that the corresponding sections in Reg. 7 provide for the lowest emission limitation through application of control techniques that are reasonably available considering technological and economic feasibility. Therefore, we propose to find that the control requirements for oil and gas sources and certain miscellaneous metal coatings are RACT for affected sources in the DMNFR Area under the 2008 8-hour ozone NAAQS.<sup>57</sup>

**b. RACT for Non-CTG Major Sources**

In Colorado's TSDs for Reasonably Available Control Technology for Major Sources, dated December 14, 2020,<sup>58</sup> Colorado identified a list of major non-CTG VOC and NO<sub>x</sub> sources in the DMNFR Area subject to RACT requirements under a Serious classification. For major VOC and NO<sub>x</sub> sources subject to nonattainment area RACT review, Colorado used the construction permit thresholds established in the State's Reg. 3 for determining which emission points to review. Accordingly, emission points exceeding two tpy of VOC at a major VOC source and five tpy of NO<sub>x</sub> at a major NO<sub>x</sub> source, as reported on a source's APEN, and that were not part of the Moderate RACT review, were evaluated. We have reviewed the State's March 22, 2021 and May 20, 2022 submittals and find its approach to including these sources in the inventory acceptable. To satisfy the Serious RACT SIP requirement to establish RACT for all existing major sources of VOC and/or NO<sub>x</sub> in the DMNFR Area, the Commission incorporated by reference NSPS limits for combustion turbines, expanded the combustion equipment requirements for boilers, expanded wood furniture coating requirements, and

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<sup>57</sup> For more information, see the EPA TSDs evaluating oil and gas and miscellaneous metal coatings RACT. Available within the docket for this action.

<sup>58</sup> Contained within the March 22, 2021 submittal.

developed a new categorical rule for foam manufacturing. These revisions were made based on a detailed review of available information on major NO<sub>x</sub> and VOC sources in the DMNFR Area, an examination of the EPA RACT/Best Available Control Technology/Lowest Achievable Emission Rate Clearinghouse for similar emission points, and consideration of CAA section 182(b) RACT requirements for other ozone nonattainment areas. Table 4 contains a list of non-CTG categories, the EPA's reference documents, and the corresponding sections of Reg. 7 that are proposed for approval in this action to fulfill RACT requirements (see section V.I. of this document).<sup>41</sup>

**Table 4-Sources, EPA Reference Documents, and Corresponding Sections of Reg. 7  
Proposed for Approval to Fulfill RACT**

Source in the DMNFR Area	The EPA's reference document or regulation (if applicable)	Reg. 7 sections fulfilling RACT
Combustion turbines	NO <sub>x</sub> Emissions from Stationary Combustion Turbines (EPA-453/3-91-026) (1991).	part E, section II.
Process heaters	NO <sub>x</sub> Emissions from Process Heaters (EPA-453/R-93-034)(1993).	part E, section II.
Combustion equipment requirements for boilers	NO <sub>x</sub> Emissions from Industrial, Commercial & Institutional Boilers (EPA-453/R-94-022)(1994).	part E, section II.
Wood furniture coating requirements	A Guide to the Wood Furniture CTG and NESHAP (EPA-453/R-97-002) (1997).	part C, section I.O.
Foam manufacturing		part E, section V.

We have reviewed the emission limitations and control requirements for the source categories in Table 4 and compared them to the EPA's regulations, ACT documents, available technical information, and guidelines. The EPA has also evaluated the submitted rules and has determined that they are consistent with the CAA, the EPA's regulations, and the EPA's policies. For more information, see the EPA TSD prepared in conjunction with this action. Based on the information in the record, we propose to find that the corresponding sections in Reg. 7 provide

for the lowest emission limitation through application of control techniques that are reasonably available considering technological and economic feasibility. Therefore, we propose to find that the control requirements for the source categories identified in Table 4 are RACT for all affected sources in the DMNFR Area under the 2008 8-hour ozone NAAQS.

### c. Negative Declarations

States are not required to adopt RACT limits for source categories for which no sources exist in a nonattainment area, and can submit a negative declaration to that effect. The EPA approved the majority of the State's negative declarations on July 3, 2018.<sup>59</sup> In its 2008 Serious OAP, Colorado reevaluated the CTGs and determined that it does not have sources in the following CTG VOC categories or subject to the potentially applicable CTG within the DMNFR Area that are listed in Table 5. We are also unaware of any such facilities operating in the Area, and thus we propose to approve the negative declarations made for the CTG categories in Table 5 for the DMNFR Area under the 2008 8-hour ozone NAAQS.

**Table 5-Negative Declarations for CTG VOC Categories**

Auto and Light-Duty Truck Assembly Coatings (2008).
Coating Operations at Aerospace Manufacturing and Rework Operations (1994).
Factory Surface Coating of Flat Wood Paneling.
Fiberglass Boat Manufacturing Materials (2008).
Flat Wood Paneling Coatings (2006).
Flexible Packaging Printing Materials (2006).
Fugitive Emissions from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment (1984).
Graphic Arts—Rotogravure and Flexography (1978).
Large Appliance Coatings (2007).
Large Petroleum Dry Cleaners (1982).
Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins.
Manufacture of Pneumatic Rubber Tires (1972).
Miscellaneous Industrial Adhesives (2008).
Plastic Parts Coatings, Tables 3, 4, 8, and 9 of the CTG (2008).
Synthetic Organic Chemical Manufacturing Air Oxidation Processes (1984)
Synthetic Organic Chemical Manufacturing Distillation and Reactor Processes (1993)
Surface Coating for Insulation of Magnet Wire (1977).
Shipbuilding/repair (1996).
Surface Coating of Automobiles and Light Duty Trucks (1977).
Surface Coating of Fabrics (1977).

<sup>59</sup> See 83 FR 31068. A negative declaration for the aerospace CTG was approved on November 5, 2021 (86 FR 61071).

Surface Coating of Large Appliances (1977).
Surface Coating of Paper (2007).

#### *D. Reasonably Available Control Measures (RACM) Analysis*

##### 1. Background

CAA section 172(c)(1) of the CAA requires that states adopt “all reasonably available control measures [RACM] as expeditiously as practicable.” The EPA interprets the CAA RACM provision to require a demonstration that: (1) The state has adopted all reasonable measures (including RACT) to meet RFP requirements and to demonstrate attainment as expeditiously as possible; and (2) no additional measures that are reasonably available will advance the attainment date or contribute to RFP for the area.<sup>60</sup> States should consider all available measures, including those being implemented in other areas, but must adopt measures for an area only if those measures are economically and technologically feasible and will advance the attainment date or are necessary for RFP.<sup>61</sup> Potentially available measures that would not advance the attainment date for an area are not considered RACM; likewise, states can reject potential RACM if adopting them would cause substantial widespread and long-term adverse impacts.<sup>62</sup> Local conditions, such as economic or implementation concerns, may also be considered. To allow the EPA to determine whether the RACM requirement has been satisfied, states should discuss in the SIP submittals whether measures “within the arena of potentially reasonable measures” are in fact reasonably available.<sup>63</sup> If the measures are reasonably available, they must be adopted as RACM.

##### 2. Evaluation

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<sup>60</sup> 40 CFR 51.912(d); Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard—Phase 2, 70 FR 71612, 71659 (Nov. 29, 2005). See also General Preamble, State Implementation Plans; General Preamble for the Implementation of title I of the Clean Air Act Amendments of 1990, 57 FR 13498, 13560 (April 16, 1992).

<sup>61</sup> 80 FR 12264, 12282 (March 6, 2015).

<sup>62</sup> *Id.*

<sup>63</sup> “Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas,” John S. Seitz, Director, Office of Air Quality Planning and Standards, EPA (Nov. 30, 1999).



Colorado previously evaluated potentially available control measures for RACM purposes with their 2008 Moderate ozone attainment plan. The EPA approved the State's RACM analysis on July 3, 2018.<sup>64</sup> The RAQC resumed RACM discussions with the CDPHE and other partners in 2018 when the DMNFR Area was reclassified to Serious, so as to identify strategies that would help the Area attain by the 2020 ozone season.<sup>65</sup> Areas of analysis included stationary and area sources, mobile sources and fuels, transportation, land use, pricing, and outreach. Subcommittee meetings were open to the public, and stakeholders provided input on the topics discussed.

The State's RACM review took place in the context of a series of state actions that had the effect of reducing emissions. Since the base year of 2011, Colorado has adopted oil and gas regulations;<sup>66</sup> implemented controls required under the State Clean Air Clean Jobs Act<sup>67</sup> through the Regional Haze SIP; and continued alternative fuels,<sup>68</sup> transportation,<sup>69</sup> and land use programs.<sup>70</sup> Additional efforts include the ongoing work of the Statewide Hydrocarbon Emissions Reduction Team and Pneumatics Task Force, and numerous bills aimed at improving air quality.<sup>71</sup>

As part of the RACM analysis, CDPHE examined emission reduction measures<sup>72</sup> being implemented in the DMNFR Area that are not included in the SIP modeling and emissions inventory because they are voluntary or difficult to quantify. Non-federally enforceable emission reduction measures were evaluated for stationary and mobile sources, lawn and garden equipment, and the transportation system; outreach and education were also evaluated as part of

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<sup>64</sup> See 83 FR 31068.

<sup>65</sup> See p. 7-3 of the OAP.

<sup>66</sup> Colorado Reg. 7, part D.

<sup>67</sup> Colo. Rev. Stat. section 40-3.2-201 *et seq.*

<sup>68</sup> E.g., fueling and charging station grants.

<sup>69</sup> E.g., Programs for improved public transit.

<sup>70</sup> E.g., example, Denver Regional Council of Governments identified urban growth area.

<sup>71</sup> See p. 7-3 of the OAP.

<sup>72</sup> See Table 48 of the OAP.

this analysis. Additionally, Colorado evaluated CAA 108(f), transportation measures<sup>73</sup> to determine whether sources have applied RACM.

After reviewing possible measures, Colorado determined that all reasonably available control measures necessary to demonstrate attainment are currently being implemented. Table 47 of Colorado's OAP lists control measures included in Colorado's SIP as they relate to the State's 2017 and 2020 emission inventories, photochemical modeling in the attainment demonstration, and weight of evidence analysis.

Emission measures that were evaluated but determined not to be RACM are discussed in chapter 7.5 of the OAP. Colorado used the following criteria to determine whether measures were considered RACM:

- Necessary to demonstrate attainment;
- Technologically or economically feasible;
- Implemented successfully in other Serious nonattainment areas;
- Could be implemented by May 1, 2020; and
- Could qualify as SIP measures by being quantifiable, enforceable, permanent, and surplus.

Emission reduction measures evaluated for RACM were broken into various categories: oil and gas, mobile source inspection and maintenance, fuels, transportation, local government policies, outreach, land use, and other. Table 54 of the OAP summarizes the measures evaluated and Colorado's RACM determination for each measure. Colorado also reviewed the EPA's Menu of Control Measures for NAAQS Implementation<sup>74</sup> and voluntary and mandatory control measures in other ozone nonattainment areas. Table 55 of the OAP lists control measures identified, and indicates which measures were included in the State's RACM review. Although Colorado's

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<sup>73</sup> See Table 52 of the OAP.

<sup>74</sup> The Menu of Control Measures gives state, local and tribal air agencies information on existing emissions reduction measures, as well as relevant information concerning the efficiency and cost effectiveness of the measures. Available at <https://www.epa.gov/air-quality-implementation-plans/menu-control-measures-naaqs-implementation>.

analysis demonstrated that none of the additional measures identified met the criteria for RACM, the State plans to continue evaluating strategies in various areas, including oil and gas, mobile source inspection and maintenance, fuels, transportation, and local government policies, as described in Table 54 of the OAP.

In its analysis, Colorado evaluated all source categories that could contribute meaningful emission reductions, and identified and evaluated an extensive list of potential control measures. To determine reasonableness and availability, the State considered the time needed to develop and adopt regulations, and the time it would take to see the benefit from these measures. The EPA has reviewed the RACM analysis and finds that there are no additional RACM that would have advanced the Serious area attainment date of 2021 for the DMNFR Area.<sup>75</sup> Therefore, the EPA proposes to approve Colorado's Serious area RACM analysis for the DMNFR Serious nonattainment area.

### *E. Motor Vehicle Inspection and Maintenance Program (I/M) Program*

#### 1. Background

As a Serious ozone nonattainment area, pursuant to CAA section 182(c)(3), Colorado was required to implement an enhanced I/M program in the DMNFR Area.<sup>76</sup> Colorado's Regulation Number 11 (Reg. 11) is titled "Motor Vehicle Emissions Inspection Program," and addresses the implementation of the State's I/M program.<sup>77</sup> Under Reg. 11 and other state law,<sup>78</sup> all eligible automobiles registered in the Automobile Inspection and Readjustment (AIR) program area<sup>79</sup> are subject to periodic emissions inspection. Currently there is an exemption from emissions inspection requirements for the first seven model years. Thereafter, an On-Board-

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<sup>75</sup> On October 7, 2022 the EPA finalized an action that among other things reclassified the DMNFR Area to Severe nonattainment status for the 2008 ozone NAAQS. *See* Final rule, Determinations of Attainment by the Attainment Date, Extensions of the Attainment Date, and Reclassification of Areas Classified as Serious for the 2008 Ozone National Ambient Air Quality Standards, 87 FR 60926. Accordingly, the State of Colorado will be required to submit a demonstration that the area will attain the Severe standard, and other elements of a Severe SIP.

<sup>76</sup> 5 CCR 1001-13.

<sup>77</sup> The provisions which have been approved by the EPA into the Colorado SIP via past rulemaking actions, including Reg. 11, are publicly available at <https://www.epa.gov/sips-co/epa-approved-statutes-and-regulations-colorado-sip>.

<sup>78</sup> CO Rev Stat section 42-4-304 (2016).

<sup>79</sup> The current nine-county AIR program area is depicted in chapter 8, figure 19, page 8-3 of the OAP.

Diagnostics (OBD) vehicle computer inspection is conducted during the first two inspection cycles (vehicles 8 through 11 model years old). Vehicles older than 11 model years are given a dynamometer-based IM240 test for 1982 and newer light-duty gasoline vehicles<sup>80</sup> and a two-speed idle test (TSI)<sup>81</sup> for 1981 and older light-duty gasoline vehicles. To improve motorist convenience and reduce program implementation costs, the State also administers a remote sensing-based “Clean Screen” program component of the I/M program. Remote sensing is a method for measuring vehicle emissions, while simultaneously photographing the license plate, when a vehicle passes through infrared or ultraviolet beams of light. Owners of vehicles meeting the Clean Screen criteria are notified by the respective County Clerk that their vehicle has passed the motor vehicle inspection process and are exempt from their next regularly scheduled program inspection.<sup>82</sup>

## 2. Evaluation

The AIR program and Reg. 11 were expanded into portions of Larimer and Weld counties as “state only” requirements in the Colorado 2009 Legislative session, with the passage of Senate Bill 09-003. The startup date of the I/M program in these two counties was November 1, 2010. The purpose of this expansion of the AIR program and Reg. 11 into portions of Larimer and Weld counties was to further reduce vehicle emissions of NO<sub>x</sub> and VOC ozone precursors in the 2008 DMNFR Area. With the reclassification of the DMNFR Area to Moderate for the 2008 8-hour ozone NAAQS, and in light of the associated CAA requirements, the State chose to

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<sup>80</sup> See 40 CFR part 51, subpart S for a complete description of EPA’s IM240 test. The IM240 test is essentially an enhanced motor vehicle emissions test to measure mass tailpipe emissions while the vehicle follows a computer-generated driving cycle trace for 240 seconds and while the vehicle is on a dynamometer.

<sup>81</sup> See 40 CFR part 51, subpart S for a complete description of EPA’s two-speed idle test. The two-speed idle test essentially measures the mass tailpipe emissions of a stationary vehicle; one reading is at a normal idle of approximately 700 to 800 engine revolutions per minute (RPM) and one reading at 2,500 RPM.

<sup>82</sup> The Clean Screen program component of Reg. 11 was originally approved for implementation in the Denver area with the EPA’s approval of the original Denver carbon monoxide (CO) redesignation to attainment and the related maintenance plan. See 66 FR 64751 (Dec. 14, 2001). The Clean Screen criteria approved in 2001 required two valid passing remote sensing readings, on different days or from different sensors and within the twelve-month period prior to that vehicle’s registration renewal date. Colorado revised Reg. 11 to expand the definition and requirements for a “clean-screened vehicle” to also include vehicles identified as low-emitting vehicles in the state-determined Low Emitting Index (LEI) that have one passing remote sensing reading, before the vehicle’s registration renewal date. These improvements and other associated revisions to the Clean Screen program were approved by the EPA on October 21, 2016 (81 FR 72720).

submit the I/M program in Larimer and Weld counties into the SIP. Accordingly, as part of Moderate Area SIP revisions for the 2008 8-hour ozone NAAQS, Colorado removed the Larimer/Weld “state-only” designation in Reg. 11 and submitted a revised Reg. 11 to the EPA, which was approved July 3, 2018.<sup>83</sup>

The most recent federally approved revisions to the Reg. 11 enhanced I/M program were adopted by the AQCC in May 2017. The revisions consisted of:

- Inclusion of OBD I/M pass/fail results as a qualifying consideration in the remote sensing clean screen low emitter index,
- Clarification of details of tailpipe and OBD inspection procedures and OBD readiness criteria, and
- Establishing authority to fail vehicles exhibiting evidence of OBD fraud.

These revisions were approved by EPA on February 7, 2019.<sup>84</sup>

On July 15, 2022, Colorado submitted supplemental modeling of the State’s I/M program for comparison against the applicable Enhanced I/M performance standard requirements in 40 CFR part 51, subpart S. Colorado used the latest approved version of the EPA’s mobile source emissions model, MOVES3.0.3 (released January 2022), for the comparative analysis.

Demonstration of program equivalency to the enhanced I/M program standard was conducted in accordance with the EPA’s published I/M performance standard modeling guidance, MOVES3 technical guidance, and additional technical guidance from the EPA as necessary.<sup>85</sup>

To demonstrate that the Colorado enhanced I/M program meets the enhanced program performance standard described in 40 CFR 51.351(i), the Colorado program must be modeled to

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<sup>83</sup> 83 FR 31068.

<sup>84</sup> 84 FR 2449. Colorado submitted the latest revisions to Reg. 11 to the EPA on May 16, 2022. The EPA will act on those revisions in a separate action. Since these most recent changes to Reg. 11 were adopted by the State after the attainment date for Serious areas under the 2008 ozone NAAQS, the revisions were not considered when evaluating the adequacy of Colorado’s enhanced I/M program in the context of this current EPA action.

<sup>85</sup> See Performance Standard Modeling for New and Existing Vehicle Inspection and Maintenance (I/M) Programs Using the MOVES Mobile Source Emissions Model, EPA-420-B-14-006 (Jan. 2014), available at <http://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100HHMP.pdf>; MOVES3 Technical Guidance: Using MOVES to Prepare Emission Inventories for State Implementation Plans and Transportation Conformity, EPA-420-B-20-052 (Nov. 2020), available at <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1010LY2.pdf>.

show that, on the proper analysis date, it obtains the same or lower emissions reductions as the federal model enhanced program. The state program may provide reductions of NAAQS relevant pollutants equivalent to the reductions expected from the model program to within  $\pm 0.02$  grams per mile for the area's total vehicle miles travelled on a July weekday in the attainment date year. Colorado's supplemental demonstration shows that the state's I/M program meets the applicable enhanced I/M performance standard requirements for the 2008 ozone NAAQS.

Based on our review and as discussed above we find that Colorado has a Vehicle I/M Program that meets the performance standard for Enhanced I/M, and we therefore propose approval of this portion of the OAP.

#### *F. Nonattainment New Source Review (NNSR)*

##### 1. Background

As a Serious ozone nonattainment area, Colorado was required to implement an NNSR program. Applicable NNSR requirements for ozone nonattainment areas are described in CAA section 182 and further defined in 40 CFR part 51, subpart I (Review of New Sources and Modifications). Under these requirements, new major sources and major modifications at existing sources must achieve the lowest achievable emission rate (LAER) and obtain emission offsets in an amount based on the specific ozone nonattainment classification. The emission offset ratio required for Serious ozone nonattainment areas is 1.2 to 1.<sup>86</sup>

##### 2. Evaluation

The Colorado SIP includes Regulation 3, part D, section V.A. (Concerning Major Stationary Source New Source Review and Prevention of Significant Deterioration, Requirements Applicable to Nonattainment Areas).<sup>87</sup> This provision requires new major sources and major modifications at existing sources in the DMNFR Area to comply with LAER and

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<sup>86</sup> CAA section 182(c)(10).

<sup>87</sup> The provisions which have been approved by the EPA into the Colorado SIP via past rulemaking actions, including Regulation Number 3, are publicly available at <https://www.epa.gov/sips-co/epa-approved-statutes-and-regulations-colorado-sip>.

obtain emission offsets at the Serious classification ratio of 1.2 to 1. The EPA approved these provisions on January 25, 2016.<sup>88</sup> Since the provisions in the Colorado SIP satisfy the CAA NNSR requirements for ozone nonattainment areas classified as Serious, we propose approval of this portion of the OAP.

### *G. Motor Vehicle Emissions Budget (MVEB)/Transportation Conformity*

#### 1. Background

Section 176(c) of the CAA establishes a requirement known as “Transportation Conformity,” under which federal agencies must ensure that actions they support or fund will conform to the applicable SIP. Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS.<sup>89</sup> The EPA’s conformity rule at 40 CFR part 93, subpart A requires that transportation plans, programs, and projects conform to SIPs, and establishes the criteria and procedures for determining whether they conform. The conformity rule requires a demonstration that emissions from the Metropolitan Planning Organization’s (MPO) Regional Transportation Plan (RTP) and the Transportation Improvement Program (TIP) are consistent with the MVEB in the control strategy SIP revision or maintenance plan.<sup>90</sup> The MVEBs are defined as the portion allocated to mobile source emissions out of the total allowable emissions of a pollutant defined in the SIP for a certain date for the purpose of demonstrating attainment or maintenance of the NAAQS or for meeting RFP milestones.<sup>91</sup>

Additionally, CAA section 182(c)(5) requires that states, every three years, submit a demonstration for Serious nonattainment areas that current aggregate VMT, aggregate vehicle emissions, congestion levels, and other relevant traffic-related and vehicle emissions-related

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<sup>88</sup> 81 FR 3963.

<sup>89</sup> CAA section 176(c)(1)(B).

<sup>90</sup> 40 CFR 93.101, 93.118, and 93.124.

<sup>91</sup> 40 CFR 93.101; *see* 40 CFR 93.118 and 93.124 for criteria and other requirements related to MVEBs. Further discussion of MVEBs is in the preamble to the transportation conformity rule. 58 FR 62188, 62193-62196 (Nov. 24, 1993).

factors (collectively “relevant parameters”) are consistent with those used for the area’s ozone attainment demonstration.

## 2. Evaluation

Colorado derived the MVEBs for NO<sub>x</sub> and VOCs from its 2020 DMNFR Serious attainment demonstration, and defined the MVEBs in chapter 11, section 11.2.1 of the OAP.

**Table 6-2020 NO<sub>x</sub> and VOC MVEBs for DMNFR Area**

Area of Applicability	2020 NO <sub>x</sub> Emissions (tpd)	2020 VOC Emissions (tpd)
Northern Subarea	9.7	8.2
Southern Subarea	45	41.2
Total Nonattainment Area	54.7	49.4

These MVEBs are consistent with, and clearly related to, the emissions inventory and the control measures in the SIP, and satisfy the criteria at 40 CFR 93.118(e)(4). Therefore, we propose approval of the MVEBs as reflected in Table 6. This proposed approval applies to the Northern Subarea and Southern Subarea MVEBs as well as the Total Nonattainment Area MVEBs. The transportation conformity subareas are defined in chapter 11, section 11.2 of the OAP and are listed below.

- The Northern Subarea is the area denoted by the ozone nonattainment area north of the Boulder County northern boundary and extended through southern Weld County to the Morgan County line. This area includes the North Front Range MPO’s (NFRMPO) regional planning area as well as part of the Upper Front Range Transportation Planning Region (TPR) in Larimer and Weld counties.
- The Southern Subarea is the area denoted by the ozone nonattainment area south of the Boulder County northern boundary and extended through southern Weld County to the Morgan County line. This area includes the nonattainment portion of the Denver Regional Council of Governments (DRCOG) regional planning area and the southern Weld County portion of the Upper Front Range TPR.



- Both subareas are further described in the OAP in Figure 20, “8-hour Ozone Nonattainment Area Subareas.”

In addition to proposing approval of the MVEBs, we also propose to approve the process described in chapter 11, section 11.2.3 in the OAP for the use of the Total Nonattainment Area MVEBs or the subarea MVEBs for the respective MPOs to determine transportation conformity for their respective RTP. As described in section 11.2.3 of Colorado’s OAP, the OAP identifies subarea MVEBs for DRCOG and the NFRMPO. These SIP-identified subarea MVEBs allow either MPO to make independent conformity determinations for the applicable subarea MVEBs whose frequency and timing needs for conformity determinations differ. As noted in section 11.2.3, DRCOG and the NFRMPO may switch from using the Total Nonattainment Area MVEBs to using the subarea MVEBs for determining conformity. To switch to use of the subarea MVEBs (or to subsequently switch back to use of the Total Nonattainment Area MVEBs) DRCOG and the NFRMPO must use the process described in the DMNFR OAP in section 11.2.3.<sup>92</sup> This process of demonstrating transportation conformity to the total or subarea area MVEBs, as described in section 11.2.3 of the OAP, was previously approved by the EPA for the Denver Moderate Ozone Plan for the 2008 8-hour standard on July 3, 2018.<sup>93</sup> Now, as to the Serious classification for the 2008 8-hour standard, the EPA finds that this process remains consistent with the CAA and with applicable EPA regulations, and therefore proposes to approve it.

Regarding transportation control requirements, as described in section 11.3 of the OAP, MVEBs are evaluated on a regular basis by the MPOs through their conformity process. Based on the most recent conformity determinations for the northern and the southern subregions, Colorado’s demonstration shows that both areas were meeting the current emissions budgets established in the 2008 Moderate area Ozone SIP, and that they are expected be able to meet the

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<sup>92</sup> See pp. 11-5 and 11-6 of the OAP.

<sup>93</sup> 83 FR 31068.

proposed budgets for the 2008 Serious area Ozone SIP in future conformity determinations. The EPA finds that the transportation control measures as described in section 11.3 of the OAP meet CAA requirements. We therefore propose to approve this section of the OAP.

#### *H. Clean Fuel Fleet Program*

##### 1. Background

Sections 182(c)(4) and 241-246 of the CAA provide that states with ozone nonattainment areas classified as Serious, Severe, or Extreme must implement a federally enforceable program to require certain centrally fueled fleet operators to include a specified percentage of clean-fuel vehicles (CFV) in their new fleet purchases to reduce emissions of ozone precursors, or else to engage in a state-managed credit trading scheme with other fleet operators who purchase CFV in excess to requirements. Section 182(c)(4) of the Act also allows states subject to the clean-fuel fleet program requirements to develop substitute programs to achieve equivalent reductions to those achieved by the default program requirements for the covered nonattainment area, and to submit them to the EPA for approval.<sup>94</sup>

##### 2. Evaluation

In the OAP, Colorado cited an EPA determination<sup>95</sup> that, beginning with the 2007 model years, both the Tier 2 conventional vehicle and engine standards and heavy-duty vehicle and engine standards are either equivalent to or more stringent than the applicable clean fuel vehicle program low emission vehicle (LEV) standards. Table 59 of the OAP includes a clean fuel fleet emission comparison demonstrating that Tier 2 and 2004 heavy-duty engine standards are equivalent or more stringent than the Clean Fuel Fleet standards and that the emission reductions from the federal standards surpassed LEV emission reductions in 2004, when the federal standards were implemented. Additionally, figure 23 of the OAP provides a comparison of Tier 3

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<sup>94</sup> Final rule, Emission Standards for Clean-Fuel Vehicles and Engines, Requirements for Clean-Fuel Vehicle Conversions, and California Pilot Test Program, 59 FR 50042 (Sept. 30, 1994).

<sup>95</sup> See EPA Dear Manufacturer Letter CCD-05 (LDV/LDT/MDPV/HDV/HDE/LD-FC), July 21, 2005, in the docket for this rulemaking.

Motor Vehicle Emission and Fuel Standards program that illustrates even larger emission reductions over CFV standards.

The EPA amended the Clean Fuel Fleet standards in 40 CFR part 88 in 2021 to address the fact that current emissions standards for engines and vehicles are either more stringent than or equivalent to the Clean Fuel Fleet standards.<sup>96</sup> According to these amendments, all new fleet purchases of vehicles and engines certified to current emission standards are deemed to meet the Clean Fuel Fleet standards as Ultra Low-Emission Vehicles.

Because 2004 model year Heavy Duty Diesel and Tier II and III vehicle standards meet or exceed the CFV LEV standards, we propose to find that Colorado meets the Federal Clean Fuel Fleet Program requirements, and to approve that portion of the submittal that addresses the requirements of section 182(c)(4) of the CAA.

### *I. SIP Control Measures*

#### *1. Background*

This section describes revisions to Colorado Regs. 7 and 21 submitted as a part of the SIP, including emission control requirements for oil and gas operations; turbines, process heaters, and other combustion equipment, foam manufacturing; architectural coatings and consumer products. The revisions also establish RACT requirements for emission points at certain CTGs and major sources of VOC and NO<sub>x</sub> in the DMNFR Area.

Colorado's Reg. 7, entitled "Control of Ozone via Ozone Precursors and Control of Hydrocarbons via Oil and Gas Emissions," contains general RACT requirements as well as specific emission limits applicable to various industries. The EPA approved the repeal and re-promulgation of Reg. 7 in 1981,<sup>97</sup> and has approved various revisions to Reg. 7 over the years. In 2008, the EPA approved revisions to the control requirements for condensate storage tanks in

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<sup>96</sup> Final rule, Improvements for Heavy-Duty Engine and Vehicle Test Procedures, and Other Technical Amendments 86 FR 34308 (June 29, 2021).

<sup>97</sup> Final rule, Colorado: Approval and Promulgation of State Implementation Plans, 46 FR 16687 (March 13, 1981).

section XII,<sup>98</sup> and later approved revisions to Reg. 7, sections I through XI and sections XIII through XVI.<sup>99</sup> The EPA also approved Reg. 7 revisions to section XVII.E.3.a establishing control requirements for rich-burn reciprocating internal combustion engines.<sup>100</sup> In 2018 the EPA approved Reg. 7 revisions in sections XII (VOC emissions from oil and gas operations) and XIII (emission control requirements for VOC emissions from graphic art and printing processes), as well as non-substantive revisions to numerous other parts of the regulation.<sup>101</sup>

In February 2021, the EPA approved Reg. 7 revisions in sections I (Applicability), IX (Surface Coating Operations), X (Use of Cleaning Solvents), XIII (Graphics Arts and Printing), XVI (Controls of Emissions from Stationary and Portable Engines and Other Combustion Equipment in the 8-Hour Ozone Control Area), and XIX (Control of Emissions from Specific Major Sources of VOC and/or NO<sub>x</sub> in the 8-hour Ozone Control Area). Revisions to incorporation by reference dates to rules and reference methods in sections II, VI, VIII, IX, X, XII, XIII, XVI and XVII were also approved, as well as non-substantive revisions to numerous other parts of the regulation.<sup>102</sup>

In November 2021, the EPA approved submitted revisions to sections II (general provisions), XII (Volatile Organic Compound Emissions from Oil and Gas Operations), and XVIII (emissions from natural gas-actuated pneumatic controllers located at or upstream of natural gas processing plants) of Reg. 7 from State submissions in 2018 and 2019.<sup>103</sup> From the State's 2020 submission, the EPA approved revisions that fully reorganized Reg. 7. into parts A–E; updated requirements for gasoline transport trucks, bulk terminals, and service stations in part B; added general solvent use requirements in part C, section II.F; and added stationary internal

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<sup>98</sup> Final rule, Approval and Promulgation of Air Quality Implementation Plans; State of Colorado; Regulation No. 7, section XII, Volatile Organic Compounds From Oil and Gas Operations, 73 FR 8194 (Feb. 13, 2008).

<sup>99</sup> Final rule, Approval and Promulgation of State Implementation Plans; State of Colorado; Attainment Demonstration for the 1997 8-Hour Ozone Standard, and Approval of Related Revisions, 76 FR 47443 (Aug. 5, 2011).

<sup>100</sup> Final rule, Approval and Promulgation of Implementation Plans; State of Colorado; Regional Haze State Implementation Plan, 77 FR 76871 (Dec. 31, 2012).

<sup>101</sup> See 83 FR 31068, 31071.

<sup>102</sup> 86 FR 11125.

<sup>103</sup> 86 FR 61071.

combustion engine and flare RACT requirements for major sources of VOC and/or NO<sub>x</sub> in the Denver Area in part E. Revisions to incorporation by reference dates to rules, updates to reference methods, and typographical, grammatical and formatting corrections were made throughout Reg. 7. Additionally, the EPA finalized approval of the State's negative declaration – (that is, its statement that there are no covered sources in the DMNFR Area) as to the aerospace CTG.

Most recently, in May 2022, the EPA conditionally approved AQCC regulations of ozone precursor and hydrocarbon emissions from oil and gas operations in sections XII.J.1 of Reg. 7 from the State's May 14, 2018 submittal and part D, sections I.D., I.E., I.F., and I.J.1. of Reg. 7 from the State's May 13, 2020 submission.<sup>104</sup> Additionally, the EPA conditionally approved Colorado's determination that Reg. 7, part D satisfies RACT requirements for the Colorado ozone SIP for the 2016 oil and natural gas CTG.

Colorado submitted new regulation number 21 (Reg. 21) on May 13, 2020, and revised Reg. 7 revisions with the OAP on March 22, 2021, and subsequent revisions on May 18, 2021 and May 20, 2022. The 2020 submittal includes new Reg. 21, which establishes VOC content limits in architectural coatings and consumer products. The 2022 revisions in Reg. 7, part C, section I.O and part E, sections II.A., III.B., and V. address RACT for major sources with VOC and/or NO<sub>x</sub> emissions equal to or greater than 50 tpy; specifically, for wood surface coatings operations, boilers, turbines, process heaters, landfill gas and biogas fired engines,<sup>105</sup> and foam manufacturing. The 2021 submittals include revisions to Reg. 7, part D, sections I.E.3., I.J.1., and III.B to address oil and gas CTG requirements, and clerical revisions in parts C, sections I.A., I.L., and E, sections II.A. Colorado made substantive SIP revisions to Reg. 21 and certain limited parts of Reg. 7, particularly part C, sections I.O. and I.L.; part D, sections I.E.3. and I.J.1;

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<sup>104</sup> 87 FR 29228 (May 13, 2022).

<sup>105</sup> The EPA will be acting on the State's RACT determination for landfill and biogas fired engines in a separate action.

and part E, sections, II.A.1.c., II.A.3.p, II.A.4.b.(i), II.A.4.b.(iv), II.A.4.f., II.A.4.g, II.A.5.a.(iii), II.A.5.b.(ii)(B), II.A.5.b.(ii)(B), II.A.5.b.(ii)(C)(4), II.A.5.c.(i)(A), II.A.6.b.(viii)(E), and V. The State also made non-substantive revisions to numerous parts of Reg. 7. For ease of review, Colorado submitted the full text of Reg. 7 and Reg. 21 as a SIP revision (with the exception of provisions designated “State Only”). The EPA is only seeking comment on Colorado’s proposed substantive changes to the SIP-approved version of Reg. 7, which are described below. We are not seeking comment on incorporation into the SIP of the revised portions of the regulation that were previously approved into the SIP and have not been substantively modified by the State as part of this submission.

As noted above, Colorado designated various parts of Reg. 7 and Reg. 21 “State Only” and in Reg. 7, section I.A.1.c and Reg. 21, section I.A.2. indicated that sections designated State Only are not federally enforceable. The EPA concludes that provisions designated State Only have not been submitted for EPA approval, but for informational purposes. Hence, the EPA is not proposing to act on the portions of Regs. 7 or 21 designated State Only, and this proposed rule does not discuss them further except as relevant to discussion of the portions of the regulation that Colorado intended to be federally enforceable.

## 2. Evaluation

### a. Analysis of Reg. 21 Changes in May 13, 2020 Submittal

The EPA proposes to approve the changes made to Reg. 21 with Colorado’s May 13, 2020 submission.

#### (i) Part A

Part A of Reg. 21 establishes new rules for limiting VOC emissions from consumer products as of May 1, 2020. “Consumer products,” as defined in section VI.GG., “means a chemically formulated product used by household and institutional consumers including, but not limited to, detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; automotive

specialty products; and aerosol adhesives. Consumer product does not include other paint products, furniture coatings, or architectural coatings.”<sup>106</sup> Section I contains the applicability requirements. The rules apply to people who sell, supply, offer for sale, distribute for sale, or manufacture for sale consumer products in the 8-hour ozone control area. Section I.B. includes a number of exemptions from the requirements in section A, such exemptions for consumer products that are manufactured in Colorado solely for shipment and use outside of Colorado, and for consumer products that have been granted an Innovative Product exemption, an Alternative Control Plan (ACP), or a variance under the Variances provisions by the California Air Resources Board (CARB).

Table 1 in section II establishes VOC content limits for manufacturing, selling, supplying, offering for sale, and distributing consumer products. Additional standards in section II include labeling, certification, and VOC limit applicability requirements for consumer products. Section II.J. includes a list of chemicals that consumer products cannot contain. Section II.K. includes a list of consumer products that cannot contain trichloroethylene in a combined amount greater than 0.01 percent by weight. Table 1 in Part A includes the VOC content limits for consumer products manufactured on or after May 1, 2020.

Section III of part A contains container labeling requirements, including a requirement for clear display of dates that products were manufactured or date codes representing the date of manufacture on containers or packages; special purpose spray adhesive classification requirements; and dilution ratios for non-aerosol floor wax strippers. Sections III.E and F. include label display requirements for energized electrical cleaner and zinc rich primers. Under section III.F aerosol adhesives, adhesive removers, electronic cleaners, electrical cleaners, energized electrical cleaners, and content products must include the product category, applicable VOC standard for the product as a percentage by weight, and the applicable substrate and/or application for special purpose spray adhesives on labels.

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<sup>106</sup> See p. 260 of the May 13, 2020 submittal.

Section IV contains reporting requirements to demonstrate compliance with the applicability and standards requirements in part A. These include maintaining records necessary to demonstrate exemptions under section I.B and of the para-dichlorobenzene content of solid air freshener, insecticide, or toilet/urinal care consumer products. Records must be maintained for a minimum of three years and made available to the Division upon request. Section IV.D. includes a list of information that must be reported to the Division within 90 days of written notice. This information includes the names and contact information of responsible parties, consumer product brand names for each product label and category, Colorado sales in pounds per year, and the net percent by weight of total product.

Section V includes test methods that should be used to determine compliance with the requirements in part A (CARB Method 310 or through calculation of the VOC content from records of the amounts of constituents used to make the product) and whether a product is a liquid or solid (ASTM D4359-90(2000)e). Section VI contains a list of definitions used throughout part A. We propose to find that the provisions in part A are consistent with CAA requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part. A.

(ii) Part B

Part B of Reg. 21 establishes new rules for limiting VOC emissions from architectural or industrial maintenance (AIM) coatings as of May 1, 2020. Architectural coating, as defined in section VI.F., “means a coating to be applied to stationary structures or their appurtenances at the site of installation, to portable buildings at the site of installation, to pavements, or to curbs. Architectural coating does not include coatings applied in shop applications or to non-stationary structures such as airplanes, ships, boats, railcars, and automobiles, as well as adhesives.”<sup>107</sup> Industrial maintenance coatings, as defined in section VI.DD., “means a high performance architectural coating, including primers, sealers, undercoaters, intermediate coats, and topcoats,

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<sup>107</sup> See p. 282 of the May 13, 2020 submittal.



formulated for application to substrates, including floors, and exposed to one or more of the following extreme environmental conditions: immersion in water, wastewater, or chemical solutions (aqueous and non-aqueous solutions), or chronic exposures of interior surfaces to moisture condensation; acute or chronic exposure to corrosive, caustic, or acidic agents, or to chemicals, chemical fumes, or chemical mixtures or solutions; frequent exposure to temperatures above 121°C (250°F); frequent heavy abrasion, including mechanical wear and scrubbing with industrial solvents, cleansers, or scouring agents; or exterior exposure of metal structures and structural components. Industrial maintenance coatings must be labeled as specified in part B, section III.D.1.”<sup>108</sup>

Section I contains the applicability requirements. The rules apply to people who sell, supply, offer for sale, distribute for sale, or manufacture for sale AIM coatings in the 8-hour ozone control area. Section I.B. includes a number of exemptions from the requirements in section B including AIM coatings that are manufactured in Colorado solely for shipment and use outside of Colorado; aerosol coating products, and AIM coatings that are sold in containers with a volume of one liter or less.

Table 1 in section II establishes VOC content limits for manufacturing, blending, supplying, selling, offering for sale, and soliciting for application AIM coatings. Section III of part B includes container labeling requirements including clearly displaying dates that products were manufactured or date codes representing the date of manufacture on containers, a statement of the manufacturer’s recommendation regarding thinning of the coating, and the VOC content in grams per liter of coating. Section III.D. includes a list of statements that should be displayed on container labels, such as “for industrial use only,” “for blocking stains,” “high gloss,” and “for metal substrates only.”

Section IV contains a list of information that must be reported to the Division within 180 days of written notice to demonstrate compliance with part B requirements. This information

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<sup>108</sup> See p. 285 of the May 13, 2020 submittal.

includes the names and mailing address of manufacturers, the names of the coatings products as they appear on the labels and the application coating categories, the VOC content in gram per liter as determined in accordance with section V, and the density of the products in pounds per gallon.

Section V includes test methods that should be used to determine compliance with the requirements in part B. Section V.A. describes the process for determining the VOC content of a coating. Section VI. contains a list of definitions used throughout part B. We propose to find that the provisions in part B are consistent with CAA requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part B.

b. Analysis of Reg. 7 Changes in March 22, 2021 Submittal

The EPA proposes to approve the following changes made to Reg. 7 with Colorado's March 22, 2021 submission.

(i) Part C, Section I

Section I of part C contains rules for surface coating operations. In this submittal, the Commission expanded Section I.O wood furniture surface coating requirements to the surface coatings of other wood products such as doors, door casings, and decorative wood accents. The provisions apply to other wood products coating operations with uncontrolled actual emissions greater than or equal to 50 tpy located in the DMNFR Area. A detailed evaluation of section I is in the TSD for this action. We propose to find that the provisions in part C are consistent with CAA and RACT requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part. C.

(ii) Part E, Section II

Section II of part E contains rules for the control of emissions from stationary and portable combustion equipment in the DMNFR Area. The revisions in art E include RACT requirements for 50 tpy major sources of VOC and/or NO<sub>x</sub> including a NO<sub>x</sub> emission limit for

boilers between 50 MMBtu/hr and 100 MMBtu/hr, a NO<sub>x</sub> emission limit for landfill gas or biogas fired engines,<sup>109</sup> and NO<sub>x</sub> emission limits for combustion turbines.

Section II.A.4.a.(iv) expands categorical boiler RACT requirements for 50-100 MMBtu/hr boilers at 50 tpy major sources to comply with a 0.1 lb/MMBtu NO<sub>x</sub> emission limit. The owners or operators of these boilers will continue to comply with the combustion process adjustment, periodic performance testing, and recordkeeping requirements in section II.

Section II.A.4.b.(i)(A) was revised to reference NSPS KKKK NO<sub>x</sub> emission limits for the turbines constructed before February 18, 2005. These emission limits are included in Table 1 of section II.A.4.b. Section II.A.4.b.(i)(A)(1) requires that turbines with CEMS that are capable of operating in both combined and simple cycle modes show compliance with a 30-day rolling average. Section II.A.4.b.(iv) adds a new requirement for turbines, air pollution control equipment, and monitoring equipment to be operated with good air pollution control practices for minimizing emissions. Section II.A.5.c.(i)(A) includes monitoring requirements for pre and post February 18, 2005 turbines.

A detailed evaluation of section II is in the TSD for this action. We propose to find that the provisions in section II are consistent with CAA and RACT requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part E, section II.

#### (iii) Part E, Section V

Section V of part E contains new rules for the control of emissions from foam manufacturing in the DMNFR Area as of January 27, 2020. Foam manufacturing operation, as defined in section V.A.3.e., “means any expanded polystyrene (EPS) production line, or portion of a production line, which processes raw EPS bead into final molded EPS product. Production line processes include, but are not limited to pre-expansion, aging (pre-puff), and molding. The manufacturing process ends after the product exits the EPS mold. ‘Foam manufacturing

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<sup>109</sup> The EPA will be acting on the State’s RACT determination for landfill and biogas fired engines in a sperate action.

operation’ also means any production line processing methylene diphenyl diisocyanate (MDI), resins, and various hardeners and thickeners into foam products and which results in VOC emissions into the atmosphere. The manufacturing process ends after the product exits the drying tunnel.” Section V.A.3. includes a list of definitions used in section V.

Section V.A.4. establishes emission limits for foam manufacturing operations. Operators must limit VOC emissions from foam manufacturing to 3.0 lbs per 100 lbs of total material processed, averaged monthly, or must control VOC emissions from foam manufacturing by 90%. Work practice requirements are set forth in section V.A.5. and require that raw materials be stored in closed, leak-free, labeled containers, and in a manner that minimizes evaporation from open containers. Sections V.A.6., 7, and 8 contain monitoring, recordkeeping, and reporting (MRR) requirements, including MRR for performance testing to determine control efficiency of emission control equipment, and requirements to keep records of the amounts of raw material processed on a daily basis, total monthly VOC emissions, and a manufacturer’s guarantee of control equipment’s emission control efficiencies. Records must be maintained for five years and made available to the Division upon request. Records of performance test protocols for performance tests under Section V.A.6.b. must be submitted to the Division for review at least thirty days before testing.

A detailed evaluation of section V is in the TSD for this action. We propose to find that the provisions in section V are consistent with CAA and RACT requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part E, section V.

#### c. Analysis of Reg. 7 Changes in May 18, 2021 Submittal

The majority of the changes to Reg. 7 from the May 18, 2021 submittal are state-only and therefore have not been submitted for inclusion in the SIP. The SIP revisions from this submittal include editorial revisions to the outline of the regulation and numbering changes to part E, section I.D.4., SIP controls for existing natural gas fired RICE. The revisions are clerical in

nature and do not affect the substance of the requirements. Therefore, we propose to approve the changes.

d. Analysis of Reg. 7 Changes in May 20, 2022 Miscellaneous Metals and Process Heaters Submittal

The EPA proposes to approve the changes made to Reg. 7 with Colorado's May 20, 2022 miscellaneous metals and process heaters submittal.

(i) Part C, Section I

Section I of part C contains rules for surface coating operations. The Commission has previously adopted requirements for metal surface coatings based on recommendations in EPA's Control of Volatile Organic Emissions from Existing Stationary Sources – Volume VI: Surface Coating of Miscellaneous Metal Parts and Products (1978), including VOC content limits, work practices, and recordkeeping requirements. In 2008, however, the EPA published a subsequent metal coating CTG, Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings (Metal Coating CTG), which recommends expanding the coatings VOC content limits from four to fifty, including work practices, application methods, and recordkeeping. Therefore, in response to EPA's concern with Colorado's existing metal parts coating requirements as based on EPA's 1978 CTG, the Commission revised the metal surface coating requirements in part C, section I to correspond to the recommendations in the 2008 Metal Coating CTG.

The revised section I.L., Manufactured Metal Parts and Metal Products, applies to sources where actual emissions are greater than or equal to 6.8 kilograms (15 lbs) per day and 1.4 kilograms (3 lbs) per hour. Starting January 1, 2022, section I.L requirements applied to metal parts and product surface coating units at facilities where total actual VOC emissions from all metal parts and products surface coating operations are greater than or equal to 2.7 tons per 12-month rolling period, before consideration of controls.

Revised section I.L.1.b. removes a number of exemptions for surface coatings of various metal parts and products: automobiles and light-duty trucks, metal cans, flat metal sheets and

strips in the form of rolls or coils, large appliances, magnet wire for use in electrical machinery, and metal furniture. Section I.L.b.(iii) adds categories for which section I.L. does not apply, including certain sources regulated by NSPS and sources that must comply with other sections of the SIP. Section I.L.2.b. includes new requirements for surface coating of manufactured metal parts or metal products facilities and operations. Section I.L.2.b.(i) requires that VOC emissions from coatings and thinners be reduced with an emission control system having a control efficiency of 90% or greater. Additionally, products must comply with the VOC content limits established in Tables 1 and 2 of section I.L.2.b. A number of new definitions were added to section I.L.1.c.

Sections I.L.3. and I.L.4. include application methods and work practice standards that owners and operators must use and follow. These include the use of high-volume low-pressure spray, roller coat, and airless spray; storing all VOC containing coatings, thinners, coating related waste materials, cleaning materials, and used shop towels in closed containers; and minimizing VOC emissions from cleaning of application, storage, mixing, and conveying equipment by cleaning equipment without atomizing the cleaning solvent and capturing spent solvent in closed containers section I.L.5. contains recordkeeping requirements to demonstrate compliance with section I.L. Records must be maintained for a minimum of five years and made available to the Division upon request.

A detailed review of section I.L. is in the TSD for this action. We propose to find that the provisions in section I.L. are consistent with CAA requirements, represent RACT for the emission limits in Table 2 “Metal Parts and Products VOC Content Limits” and Table 7 “Metal Parts and Products VOC Emission Rate Limits” of the 2008 Miscellaneous Metal Parts and Products CTG, and that they strengthen the SIP. We therefore propose to approve the revisions in part C, section I.<sup>110</sup>

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<sup>110</sup> In this action, we are not finalizing the State’s determination that RACT for the miscellaneous metal parts CTG has been met, because Colorado has not adopted limits or negative declarations for sources listed in Table 5,

(ii) Part E, Section II

Section II of part E contains rules for the control of emissions from stationary and portable combustion equipment in the 8-hour ozone control area. The Commission revised this section of Reg. 7 to include provisions in the SIP that require the implementation of RACT for process heaters at major sources of NO<sub>x</sub> emissions. NO<sub>x</sub> emission limits apply to natural gas-fired and refinery gas-fired process heaters with a heat input rate greater than or equal to 5 MMBtu/hr.

Table 2 in section II.A.4.g. contains NO<sub>x</sub> emission limits of 0.05 lb/MMBtu for natural gas fired and 0.1 lb/MMBtu for refinery fuel gas fired process heaters with a heat input rate greater than 5 MMBtu/hr. Section II.A.5.a. adds compliance dates for process heaters subject to the section II.A.4.g. requirements. Continuous emission monitoring in section II.A.5.b.(i), performance testing requirements in section II.A.5.b.(ii) were expanded to include section II.A.4.g. process heaters. Section II.A.6.b.(viii)(E) was added to include combustion process adjustment requirements for process heaters.

A detailed evaluation of section II is in the TSD for this action. We propose to find that the provisions in section II are consistent with CAA and RACT requirements, and that they strengthen the SIP. We therefore propose to approve the revisions in part E, section II.

e. Analysis of Reg. 7 Changes in May 20, 2022 Part D Definitions Submittal

The majority of the changes to Reg. 7 from the State's May 20, 2022 part D definitions submittal are state-only and therefore have not been submitted for inclusion in the SIP. The SIP revisions from this submittal include revisions to definitions included in Reg. 7, part D, section III for natural gas-actuated pneumatic controllers associated with oil and gas operations. The revisions to definitions associated with pneumatic controllers reflect more accurate and

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Pleasure Craft Surface Coating VOC Content Limits or Table 6, Motor Vehicle Materials VOC Content Limits of the CTG for Miscellaneous Metal and Plastic Parts Coatings, EPA-453/R-08-003 (Sept. 2008). The State is actively working on adopting RACT for these sources. Therefore, we will be acting on these categories in a separate rulemaking.

appropriate technical definitions and do not affect the substance of the requirements. Therefore, we propose to approve the changes.

f. Analysis of Reg. 7 Changes in May 14, 2018, May 13, 2020, and May 20, 2022 Part D Oil and Gas Submittals

In November 2021, the EPA approved the majority of revisions to Colorado's regulations for oil and gas operations from State submissions in 2018 and 2020<sup>111</sup> but deferred action on several portions of the submittals because we determined that Colorado's SIP revisions did not meet oil and gas CTG RACT requirements for testing and monitoring requirements for combustion control devices for storage vessels and centrifugal compressors. On October 20, 2021, Colorado submitted a letter committing to adopt and submit specific revisions by June 30, 2022. Specifically, the State committed to add requirements for performance testing of certain combustion devices consistent with the EPA's oil and gas CTG by using the same frequency, testing protocol, and recordkeeping requirements that apply to storage vessels and wet seal centrifugal compressors required to be controlled under the EPA's oil and gas CTG (*i.e.*, storage vessels that have the potential for VOC emissions equal to or greater than 6 tpy). The EPA issued a conditional approval of Reg. 7 revisions and the State's RACT determination for the oil and gas CTG on May 13, 2022<sup>112</sup> based on the commitment letter submitted by the APCD. An evaluation of Reg. 7 revisions from the State's May 14, 2018 and May 13, 2020 submittals and October 20, 2021 commitment letter is in our February 17, 2022 proposed rule.<sup>113</sup>

The revisions from the May 20, 2022 part D, Oil and Gas submittal are consistent with the commitments in the letter<sup>114</sup> and include provisions for performance testing or demonstration of manufacturer testing for combustion equipment used to control emissions from storage vessels in section I.E.3. and wet seal centrifugal compressors in section I.J.1.h. A detailed evaluation of

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<sup>111</sup> 86 FR 61071.

<sup>112</sup> 87 FR 29228.

<sup>113</sup> Proposed rule, Air Plan Conditional Approval; Colorado; Revisions to Regulation Number 7 and Oil and Natural Gas RACT Requirements for 2008 8-Hour Ozone Standard for the Denver Metro/North Front Range Nonattainment Area, 87 FR 8997.

<sup>114</sup> See <https://www.coloradosos.gov/CCR/eDocketDetails.do?trackingNum=2021-00594>.



section I is in our February 17, 2022 proposed rule and the associated TSD for that action.<sup>115</sup> We propose to find that the revisions in section I from the State's May 20, 2022 part D, Oil and Gas submittal are consistent with CAA and RACT requirements, and that they strengthen the SIP. We also propose to find that the State has adopted and submitted the specific revisions it has committed to by June 30, 2022 and that the conditional approval will now convert to full approval.

## **VI. Proposed Action**

We propose to approve the majority of the OAP submittal from the State of Colorado for the DMNFR Area submitted on March 22, 2021. (In this rule we are not proposing any action on the submitted attainment demonstration, enhanced monitoring, or contingency measures.)

Specifically, we propose to approve:

- Milestone and future year emissions inventories;
- RFP demonstration;
- Demonstration of RACT for oil and natural gas industry VOC CTG sources;
- Demonstration of RACT for certain miscellaneous metal parts coatings VOC CTG sources;
- Demonstration of RACT for certain VOC and NO<sub>x</sub> non-CTG sources;
- Demonstration of RACM implementation;
- Motor vehicle I/M program;
- NNSR program; and
  - MVEBs.

We also propose to approve SIP revisions to Reg. 21 submitted by the State on May 13, 2020 and to Reg. 7 submitted by the State on March 22, 2021, May 18, 2021, and May 20, 2022

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<sup>115</sup> See Technical Support Document for Proposed Action on the Reasonably Available Control Technology Determination for Oil and Gas CTG Sources Within Colorado's Denver Metro/North Front Range Area 2008 Ozone State Implementation Plan, Air and Radiation Program, U.S. EPA Region 8, January 2022, available within the docket for this action.

as shown in Table 7. We are proposing to approve Colorado’s determination that the above rules constitute RACT for the specific categories addressed in Tables 3 and 4. A comprehensive summary of the revisions in Colorado’s Regs. 7 and 21 organized by the EPA’s proposed rule action and submittal dates are provided in the Table 7.

**Table 7-List of Colorado Revisions to Regs. 7 and 21 that the EPA Proposes to Approve**

Revised sections in May 14, 2018, May 13, 2020, March 22, 2021, and May 20, 2022 submittals proposed for approval
<p><i>May 14, 2018:</i> Reg. 7, part D, section XII.J.1.</p>
<p><i>May 13, 2020, Oil and Gas Submittal:</i> Reg. 7, part D, sections I.D.–D.3.a.(i), I.D.3.b.–b.(i), I.D.3.b.(ii), I.D.3.b.(v), I.D.3.b.(vii), I.D.3.b.(ix), I.D.4.–I.E.1.a., I.E.2.–c.(ii), I.E.2.c.(iv)–c.(viii), I.F.–1.d., I.F.1.g.–g.(xii), I.F.1.h.–F.2.a., I.F.2.c.–c.(vi), I.F.3.–3.a, I.F.3.c.–c.(i)(C), and I.J.1.–j. (renumbering).</p>
<p><i>May 13, 2020, Reg. 21 Submittal:</i> Reg. 21, part A, sections I-I.A.1, I.B.-VI.AAAAAAA., part B, sections I.-I.A.1., I.B.-VI.TTT.</p>
<p><i>March 22, 2021 Submittal</i> Reg. 7, part C, sections I.O., I.O.2., I.O.3.a., I.O.3.b.-c., I.O.4.a., I.O.5.a., part E, sections II.A.1.b., II.A.4., II.A.4.a.(iii), II.A.4.a.(iv), II.A.4.b.(i)-(A)(4), II.A.4.b.(iv), II.A.5.c.(i)(A)-(2), II.A.6.a.(ii), II.A.6.b.(viii)(B), and III.B.</p>
<p><i>May 18, 2021 Submittal</i> Reg. 7, Outline of Regulation, parts A, B, C, and D; part E and part F; part E, sections I.A.3. and I.D.4.-a.(ii) (renumbering).</p>
<p><i>May 20, 2022 Misc. Metals and Process Heaters Submittal</i> Reg. 7, part C, sections I.A.6.b., I.L.1.a., I.L.1.b.(i), I.L.b.(ii), I.L.1.b.(iii)-(vii), I.L.1.c.(ii)-(xxvi), I.L.2.a., I.L.2.b.-I.L.5.d., part D, section IIIC.4.e.(i)(D)(3)(b), part E, sections II.A.2.f., II.A.3.p., II.A.4., II.A.4.a.(iv), II.A.4.b.(iii), II.A.4.e.(ii), II.A.4.g.-(ii), II.A.5.a.-b.(iv), II.A.6.b.(viii)(E), and II.A.6.c.(ii).</p>
<p><i>May 20, 2022 Part D Definitions Submittal</i> Reg. 7, part D, sections III.B.2., III.B.5., III.B.7., III.B.11., and III.B.13.</p>
<p><i>May 20, 2022 Part D Oil and Gas Submittal</i> Reg. 7, part D, sections I.E.3-a.(iii) and I.J.1.g.-k.</p>

## VII. Consideration of Section 110(l) of the CAA

Under section 110(l) of the CAA, the EPA cannot approve a SIP revision if the revision would interfere with any applicable requirement concerning attainment and reasonable further progress toward attainment of the NAAQS, or any other applicable requirement of the Act. In addition, section 110(l) requires that each revision to an implementation plan submitted by a state be adopted by the state after reasonable notice and public hearing.

The Colorado SIP revisions that the EPA is proposing to approve do not interfere with any applicable requirements of the Act. The Reg. 7 revisions submitted by the State are intended to strengthen the SIP and to serve as RACT for certain sources for the Colorado ozone SIP. Colorado's submittals provide adequate evidence that the revisions were adopted after reasonable public notices and hearings. Therefore, CAA section 110(l) requirements are satisfied.

### **VIII. Environmental Justice Considerations**

Executive Order 12898<sup>116</sup> directs federal agencies to identify and address “disproportionately high and adverse human health or environmental effects” of their actions on minority populations and low-income populations to the greatest extent practicable and permitted by law. Additionally, Executive Order 13985<sup>117</sup> directs federal agencies to assess whether and to what extent their programs and policies perpetuate systemic barriers to opportunities and benefits for underserved populations, and Executive Order 14008<sup>118</sup> directs federal agencies to develop programs, policies, and activities to address the disproportionately and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities.

To identify potential environmental burdens and susceptible populations in the DMNFR Area, a screening analysis was conducted using the EJSCREEN<sup>119</sup> tool to evaluate environmental and demographic indicators within the area, based on available data from the Census Bureau's American Community Survey. The tool outputs showing the results of this assessment are in the docket for this action. These results indicate that within the DMNFR Area there are census block groups that are above the national averages and above the 80<sup>th</sup> percentile (in comparison to the nation as a whole) for the numbers of persons experiencing low income

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<sup>116</sup> Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 FR 7629 (Feb. 16, 1994).

<sup>117</sup> 86 FR 7009 (Jan. 25, 2021).

<sup>118</sup> 86 FR 7619 (Feb. 1, 2021).

<sup>119</sup> EJSCREEN is an environmental justice mapping and screening tool that provides the EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators; available at <https://www.epa.gov/ejscreen/what-ejscreen>.

and people of color. These populations may be vulnerable and subject to disproportionate impacts within the meaning of the executive orders described above. Further, as the EJSCREEN analysis is a screening-level assessment and not an in-depth review, it is possible that there are other vulnerable groups within the DMNFR Area.

As to all vulnerable groups within the DMNFR Area, as explained below we believe that this action will be beneficial and will tend to reduce impacts. When the EPA establishes a new or revised NAAQS, the CAA requires the EPA to designate all areas of the U.S. as either nonattainment, attainment, or unclassifiable. If an area is designated nonattainment for a NAAQS, the state must develop a plan outlining how the area will attain and maintain the standard by reducing air pollutant emissions. In this action we are proposing to approve the majority of the State's OAP submittal for the DMNFR Area and state rules as meeting RACT and satisfying other CAA requirements. The EPA has defined RACT as the lowest emission limitation that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility. Approval of these rules into the SIP will establish federally enforceable requirements that may reduce emissions from operations in the area. These requirements will contribute to the increased protection of those residing, working, attending school, or otherwise present in those areas, and we propose to determine that this rule, if finalized, will not have disproportionately high or adverse human health or environmental effects on communities with environmental justice concerns.

## **IX. Incorporation by Reference**

In this document, the EPA is proposing to include regulatory text in an EPA final rule that includes incorporation by reference. In accordance with requirements of 1 CFR 51.5, the EPA is proposing to incorporate by reference Colorado AQCC Regulation 7 pertaining to the control of ozone via ozone precursors and control of hydrocarbons via oil and gas emissions and

Regulation 21 pertaining to Control of Volatile Organic Compounds from Consumer Products and Architectural and Industrial Maintenance Coatings discussed in section VI of this preamble.

The EPA has made, and will continue to make, these materials generally available through [www.regulations.gov](http://www.regulations.gov) and at the EPA Region 8 Office (please contact the person identified in the **FOR FURTHER INFORMATION CONTACT** section of this preamble for more information).

## **X. Statutory and Executive Order Reviews**

Under the CAA, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, the EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely proposes to approve state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- Is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Orders 12866 (58 FR 51735, October 4, 1993) and 13563 (76 FR 3821, January 21, 2011);
- Does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 *et seq.*);
- Is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*);
- Does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- Does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);

- Is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- Is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- Is not subject to requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and
- Does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, the SIP is not approved to apply on any Indian reservation land or in any other area where EPA or an Indian tribe has demonstrated that a tribe has jurisdiction. The proposed rule does not have tribal implications and will not impose substantial direct costs on tribal governments or preempt tribal law as specified by Executive Order 13175 (65 FR 67249, November 9, 2000).

#### **List of Subjects in 40 CFR Part 52**

Environmental protection, Air pollution control, Carbon monoxide, Greenhouse gases, Incorporation by reference, Intergovernmental relations, Lead, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

**Authority:** 42 U.S.C. 7401 *et seq.*

Dated: October 30, 2022.

**KC Becker,**

*Regional Administrator,*

*Region 8.*

